# **Quick Installation Guide**

## Introduction

Pluto E220 is built around the latest generation of Intel's Baytrail. Baytrail has been improved 3D graphics performance with up to 5x more power and 2x greater CPU performance over previous generation. The whole new SOC structure packs more powerful capability for your tasks or applications.

# **E220 Specification**

| ltem              | Spec   | Optional              |
|-------------------|--|-----------------------|
| Processor         | Intel Bay Trail Desktop J1900                      | J1800,                |
| Chipset           | SoC  |                       |
| OS support        | Linux, Win 7, Win 8, Android                       |                       |
| РСВ               | Mini-ITX proprietary, 4 layer, 182mm x 185mm       |                       |
| Memory            | DDR3L 1333/1600(runs at 1333 MHz) SO-              |                       |
|                   | DIMMs, (2 x So-DIMM slot, up to 8GB)               |                       |
| LAN               | Realtek RTL8111E GLAN x2                           | Single LAN            |
| Audio             | Realtek ALC-662                                    |                       |
| Storage           | SATA DOM or 2.5" SATA HDD/SSD or mSATA             |                       |
| Mini Card         | 1 Full-length for mSATA One-sided screw            |                       |
|                   | 1 Half-length for wireless module                  |                       |
| WLAN Support      | For 802.11 b, g, n                                 | Wireless Card Antenna |
| Display interface | 1 x DVI-I, 1 x HD Out                              |                       |
| SPI Flash         | 16Mb   |                       |
| Front I/O         | 1 x USB3.0, 1 x USB2.0, MIC-in, Headphone-         |                       |
|                   | out, power button                                  |                       |
| Rear I/O          | 2 x PS/2, 4 x USB2.0 ,1 x Ethernet RJ45, 1 x       | Parallel Port can be  |
|                   | DVI-I,1 x HD out, 2 x Serial Port,1 x DC jack, 1 x | removed               |
|                   | Kensington lock                                    |                       |

| Internal speaker | 1 x Buzzer As default                 | Speaker is the option |
|------------------|---------------------------------------|-----------------------|
| Power supply     | 65W, 19V, Power Adapter               |                       |
| Environment      | Fanless                               |                       |
|                  | System Temp: 10 Degree C~ 35 Degree C |                       |
|                  | Humidity: 20%~85% Non-Condensing      |                       |
|                  | MB Temp: 0~60 Degree C                |                       |
| VESA Mount       | Yes (100mmx100mm)                     |                       |
| VESA Bracket     |                                       | Support 75x75 and     |
|                  |                                       | 100x100 VESA          |
|                  |                                       | standard              |
| Stand            | For vertical use                      |                       |

# Interface



| 1 | Power Button                       |
|---|------------------------------------|
| 2 | LED Indicator                      |
| 3 | Earphone Jack                      |
| 4 | Microphone Jack                    |
| 5 | USB 2.0 Port                       |
| 6 | USB 3.0 Port                       |
| 7 | WiFi Antenna(Optional)             |
| 8 | RJ45 (2 <sup>nd</sup> is optional) |

| 9  | USB 2.0                  |
|----|--------------------------|
| 10 | Serial Ports             |
| 11 | HD Out                   |
| 12 | DVI-I                    |
| 13 | Parallel Ports(Optional) |
| 14 | PS/2                     |
| 15 | DC-in                    |
| 16 | For Kensington Lock      |

# Installation



| HDD/SDD Installation |  |  |
|----------------------|--|--|
|                      | Use the HDD bracket for the HDD<br>installation.<br>Unscrew to detach the bracket<br>If you want to install the SATA DOM, just<br>remove the bracket and install the DOM to<br>the SATA connector. |  |
|                      | Align the screw holes for HDD and bracket  |  |
|                      | Fix the HDD with screws on the back side of the bracket  |  |
|                      | Finish the HDD bracket assembly  |  |

| Connect the HDD SATA cable                    |
|---|
| Connect the other side of the cable to the MB |

## **E220 BIOS Setup Specification**



Rev: R0.03

## 1. Date: 11/05/2013 Main Page

| Main Advanced           | Device     | Chipset    | Security      | Boot     | Save & Exit            |
|-------------------------|------------|------------|---------------|----------|------------------------|
| <b>BIOS Information</b> |            |            |               |          | ltem help              |
| BIOS Vender             |            | Amer       | ican Megat    | rends    |                        |
| Core Version            |            | 5.012      |               |          |                        |
| Compliancy              |            | UEFI       | 2.3; PI 1.2   |          |                        |
| BIOS Version            |            | D73        | 00X09         |          |                        |
| Build Date and Ti       | me         | 10/0       | 9/2013        |          |                        |
|                         |            |            |               |          |                        |
|                         |            |            | 19:02:        | 20       |                        |
| Processor Inform        | ation      |            |               |          |                        |
| Intel(R) Celeron(F      | R) CPU J   | 1750 @ 2   | .41GHz        |          |                        |
| Microcode Revisi        | on         | 216        |               |          |                        |
|                         |            |            |               |          | →←: Select Screen      |
| System Language         |            | [Englis    | sh]           |          | ↑↓: Select Item        |
|                         |            |            |               |          | Enter: Select          |
| System Date             |            | [Mon       | mm/dd/yyyy    | /]       | +/- : Change Opt       |
| System Time             |            | [hh: m     | ım:ss]        |          | F1: General Help       |
|                         |            |            |               |          | F2: Previous Values    |
| Lan0 MAC Addres         | S          | XX-XX-     | XX-XX-XX-X)   | 2        | F3: Optimized Defaults |
| Lan1 MAC Addres         | S          | XX-XX-     | XX-XX-XX-XX   | 2        | F4: Save & Reset       |
|                         |            |            |               |          | ESC: Exit              |
| Access Level            |            | Admir      | nistrator     |          |                        |
| Vers                    | ion 2.15.1 | 236. Copyr | iaht (C) 2012 | American | Megatrends, Inc.       |

| Field Name    | BIOS Vender   |
|---------------|---|
| Default Value | AMI Megatrends  |
| Comment       | This field is not selectable. There is no help text associated with i |

| Field Name    | Core Version  |
|---------------|---|
| Default Value | 5.008   |
| Comment       | This field is not selectable. There is no help text associated with i |

| Field Name    | Complacency   |
|---------------|---|
| Default Value | UEFI 2.3; PI 1.2  |
| Comment       | This field is not selectable. There is no help text associated with it. |

| Field Name    | BIOS Version  |
|---------------|---|
| Default Value | Display the version of the BIOS   |
| Comment       | This field is not selectable. There is no help text associated with it. |

| Field Name    | Build Date and Time   |
|---------------|---|
| Default Value | Display build date and time of the BIOS                                 |
| Comment       | This field is not selectable. There is no help text associated with it. |

| Field Name | Processor Information   |
|------------|---|
| Value      | Display the installed CPU brand.  |
| Comment    | This field is not selectable. There is no help text associated with it. |

| Field Name | Microcode Revision   |
|------------|--|
| Value      | Display processor micro-code revision.                                 |
| Comment    | This field is not selectable. There is no help text associated with it |

| Field Name     | System Date  |
|----------------|--|
| Default Value  | [xxx, mm dd yyyy]                                      |
| Possible Value | [XXX, XX:XX:XXXX]                                      |
| Help           | Set the Date. Use Tab to switch between Date elements. |

| Field Name     | System Time  |
|----------------|--|
| Default Value  | [hh :mm :ss]   |
| Possible Value | [xx :xx :xx]   |
| Help           | Set the Time. Use Tab to switch between Time elements. |

| Field Name | LAN0 MAC Address  |
|------------|---|
| Value      | Display Lan0 MAC address  |
| Comment    | This field is not selectable. There is no help text associated with it. |

| Field Name | LAN1 MAC Address         |
|------------|--------------------------|
| Value      | Display Lan1 MAC address |

| Field Name | Access Level  |
|------------|---|
| Value      | Display Access Level info.  |
| Comment    | This field is not selectable. There is no help text associated with it. |

## 2. Advanced Page

| Main Adv                 | vanced      | Device     | Chipset  | Security | Boot | Save & | Exit                   |
|--------------------------|-------------|------------|----------|----------|------|--------|------------------------|
| ► SMART :                | Settings    |            |          |          |      |        | ltem help              |
| ► Super IO Configuration |             |            |          |          |      |        |                        |
| ►Intel(R) S              | Smart Co    | nnect Te   | chnology |          |      |        |                        |
| ►S5 RTC                  | Wake Se     | ttings     |          |          |      |        |                        |
| ► Processo               | or Informa  | ation      |          |          |      |        |                        |
| ► PPM Cor                | nfiguratio  | n          |          |          |      |        |                        |
| SATA Co                  | onfiguratio | on         |          |          |      |        |                        |
| ► Network                | Stack Co    | onfigurati | on       |          |      |        |                        |
| CSM Co                   | onfiguratio | n          |          |          |      |        |                        |
| ►USB                     | Conf        | igura      | tion     |          |      |        |                        |
| ► Security               | Configura   | ation      |          |          |      |        |                        |
|                          |             |            |          |          |      |        | →←: Select Screen      |
|                          |             |            |          |          |      |        | ↑↓: Select Item        |
|                          |             |            |          |          |      |        | Enter: Select          |
|                          |             |            |          |          |      |        | +/- : Change Opt       |
|                          |             |            |          |          |      |        | F1: General Help       |
|                          |             |            |          |          |      |        | F2: Previous Values    |
|                          |             |            |          |          |      |        | F3: Optimized Defaults |
|                          |             |            |          |          |      |        | F4: Save & Reset       |
|                          |             |            |          |          |      |        | ESC: Exit              |
|                          |             |            |          |          |      |        |                        |

| Field Name | SMART Settings  |
|------------|---|
| Help       | System SMART Settings   |
| Comment    | Press Enter when selected to go into the associated Sub-Menu. |

| Field Name | Super IO Configuration  |
|------------|---|
| Help       | System Super IO Chip Parameters                               |
| Comment    | Press Enter when selected to go into the associated Sub-Menu. |

| Field Name | Intel(R) Smart Connect Technology                             |
|------------|---|
| Help       | Intel (R) Smart Connect Technology Settings                   |
| Comment    | Press Enter when selected to go into the associated Sub-Menu. |

| Field Name | S5 RTC Wake Settings  |  |  |
|------------|---|--|--|
| Help       | Enable system to wake from S5 using RTC alarm                 |  |  |
| Comment    | Press Enter when selected to go into the associated Sub-Menu. |  |  |

| Field Name | Processor Information   |  |  |
|------------|---|--|--|
| Help       | Processor Information Parameters.                             |  |  |
| Comment    | Press Enter when selected to go into the associated Sub-Menu. |  |  |

| Field Name | PPM Configuration   |  |
|------------|---|--|
| Help       | PPM Configuration Parameters                                  |  |
| Comment    | Press Enter when selected to go into the associated Sub-Menu. |  |

| Field Name | SATA Configuration  |  |  |
|------------|---|--|--|
| Help       | IDE Devices Configuration                                   |  |  |
| Comment    | Press Enter when selected to go into the associated Sub-Men |  |  |

| Field Name | Network Stack Configuration                                   |  |  |
|------------|---|--|--|
| Help       | Network Stack Settings  |  |  |
| Comment    | Press Enter when selected to go into the associated Sub-Menu. |  |  |

| Field Name | CSM Configuration  |  |  |
|------------|--|--|--|
| Help       | CSM configuration:   |  |  |
|            | Enable/Disable, Option ROM execution settings, etc.          |  |  |
| Comment    | Press Enter when selected to go into the associated Sub-Menu |  |  |

| Field Name | USB Configuration   |  |  |
|------------|---|--|--|
| Help       | USB Configuration Parameters.                               |  |  |
| Comment    | Press Enter when selected to go into the associated Sub-Men |  |  |

| Field Name | Security Configuration  |  |  |
|------------|---|--|--|
| Help       | Intel(R) Anti-Theft Technology Configuration.                 |  |  |
| Comment    | Press Enter when selected to go into the associated Sub-Menu. |  |  |

#### 2.1 SMART Settings

| Main | Advanced    | Device Chip        | oset Security      | Boot      | Save & Exit            |
|------|-------------|--------------------|--------------------|-----------|------------------------|
| SMAR | T settings  |                    |                    |           | ltem help              |
|      |             |                    |                    |           |                        |
| SMAR | T Self Test |                    | [Disabled]         |           |                        |
|      |             |                    |                    |           |                        |
|      |             |                    |                    |           |                        |
|      |             |                    |                    |           | →←: Select Screen      |
|      |             |                    |                    |           | ↑↓: Select Item        |
|      |             |                    |                    |           | Enter: Select          |
|      |             |                    |                    |           | +/- : Change Opt       |
|      |             |                    |                    |           | F1: General Help       |
|      |             |                    |                    |           | F2: Previous Values    |
|      |             |                    |                    |           | F3: Optimized Defaults |
|      |             |                    |                    |           | F4: Save & Reset       |
|      |             |                    |                    |           | ESC: Exit              |
|      |             |                    |                    |           |                        |
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| Field Name | SMART Settings |
|------------|----------------|
|------------|----------------|

| Field Name     | SMART Self Test                              |  |  |
|----------------|--|--|--|
| Default Value  | [Disabled]                                   |  |  |
| Possible Value | Enabled                                      |  |  |
|                | Disabled                                     |  |  |
| Help           | Run SMART Self Test on all HDDs during POST. |  |  |

## 2.2 Super IO Configuration

| Main                   | Advanced      | Device    | Chipset | Security Boot      | Save & Exit            |
|------------------------|---------------|-----------|---------|--------------------|------------------------|
| Super IO Configuration |               |           |         |                    | ltem help              |
|                        |               |           |         |                    |                        |
| Super                  | IO Chip       |           |         | W83627DHG          |                        |
|                        |               |           |         |                    |                        |
| Serial                 | Port 1 Confi  | iguration |         |                    |                        |
| Serial                 | Port          |           |         | [Enabled]          |                        |
| Device                 | e Settings    |           |         | IO=xxx             | →←: Select Screen      |
|                        |               |           |         |                    | ↑↓: Select Item        |
| Serial                 | Port 2 Confi  | iguration |         |                    | Enter: Select          |
| Serial                 | Port          |           |         | [Enabled]          | +/- : Change Opt       |
| Device                 | e Settings    |           |         | IO=xxx             | F1: General Help       |
|                        |               |           |         |                    | F2: Previous Values    |
| Paralle                | el Port Confi | iguration |         |                    | F3: Optimized Defaults |
| Paralle                | el Port       |           |         | [Enabled]          | F4: Save & Reset       |
| Device                 | e Settings    |           |         | IO=xxx             | ESC: Exit              |
| Device                 | Mode          |           |         | [STD Printer Mode] |                        |
|                        |               |           |         |                    |                        |

| Field Name | Super IO Chip   |
|------------|---|
| Value      | Display Super IO Chip name  |
| Comment    | This field is not selectable. There is no help text associated with |
|            | itt.  |

| Field Name | Serial Port 1 Configuration   |
|------------|---|
| Value      | Display Serial Port 1 Configuration                                 |
| Comment    | This field is not selectable. There is no help text associated with |
|            | itt.  |

| Field Name     | Serial Port                         |
|----------------|-------------------------------------|
| Default Value  | [Enabled]                           |
| Possible Value | Enabled                             |
|                | Disabled                            |
| Help           | Enable or Disable Serial Port (COM) |

| Field Name | Device Settings   |
|------------|---|
| Value      | Display Serial Port 1 Configuration                                 |
| Comment    | This field is not selectable. There is no help text associated with |
|            | itt.  |

|        |          |                |           | 37                   |                   |   |
|--------|----------|----------------|-----------|----------------------|-------------------|---|
| Main   | Advanced | Device C       | hipset    | Security             | Boot              | Save & Exit   |
| ISCT S | Support  |                |           | [Disa                | bled]             | ltem help   |
|        |          |                |           |                      |                   | <ul> <li>→←: Select Screen</li> <li>↑↓: Select Item</li> <li>Enter: Select</li> <li>+/- : Change Opt</li> <li>F1: General Help</li> <li>F2: Previous Values</li> <li>F3: Optimized Defaults</li> <li>F4: Save &amp; Reset</li> <li>ESC: Exit</li> </ul> |
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#### 2.3 Intel(R) Smart Connect Technology

# Field Name ISCT Support Default Value [Disabled] Possible Value Enabled Disabled Disabled Help Enable/Disable ISCT Support

|                |            | 0       |               |                        |
|----------------|------------|---------|---------------|------------------------|
| Main Advand    | ced Device | Chipset | Security Boot | Save & Exit            |
| Wake system fr | om S5      |         | [Disabled]    | ltem help              |
|                |            |         |               | →←: Select Screen      |
|                |            |         |               | ↑↓: Select Item        |
|                |            |         |               | Enter: Select          |
|                |            |         |               | +/- : Change Opt       |
|                |            |         |               | F1: General Help       |
|                |            |         |               | F2: Previous Values    |
|                |            |         |               | F3: Optimized Defaults |
|                |            |         |               | F4: Save & Reset       |
|                |            |         |               | ESC: Exit              |
|                |            |         |               |                        |

#### 2.4 S5 RTC Wake Setting

| Field Name     | Wake system from S5   |
|----------------|---|
| Default Value  | [Disabled]  |
| Possible Value | Disabled  |
|                | Fixed Time  |
|                | Dynamic Time  |
| Help           | Enabler or disable System wake on alarm event, Select             |
|                | FixedTime, system will wake on the hr::min::sec specified. Select |
|                | DynamicTime , system will wake on the current time + Increase     |
|                | minute (s)  |

| Main     | Advanced       | Device   | Chipset  | Security | Boot     | Save & Exit             |          |
|----------|----------------|----------|----------|----------|----------|-------------------------|----------|
| Proc     | essor Inforn   | nation   |          |          |          | ltem                    | help     |
|          |                |          |          |          |          |                         |          |
| Intel(   | (R) Celeron(   | R) CPU J | 1750 @ 2 | .41GHz   |          |                         |          |
| CPU      | Signature      |          |          | 30672    |          |                         |          |
| Micro    | ocode Patch    | 1        |          | 216      |          |                         |          |
| Max      | CPU Speed      |          |          | 2410     | MHz      |                         |          |
| Min (    | CPU Speed      |          |          | 500 M    | Hz       |                         |          |
| Proc     | essor Cores    | ;        |          | 2        |          |                         |          |
| Intel    | HT Technolo    | ogy      |          | Not S    | upported |                         |          |
| Intel    | VT-x Techno    | ology    |          | Supp     | orted    |                         |          |
|          |                |          |          |          |          |                         |          |
| L1 Da    | ata Cache      |          |          | 24 KB    | 3 x 2    |                         |          |
| L1 C     | ode Cache      |          |          | 32 KB    | 5 x 2    |                         |          |
| L2 C     | ache           |          |          | 1024     | KB x 1   |                         |          |
| L3 Cache |                |          | Not P    | resent   |          |                         |          |
|          |                |          |          |          |          | →←: Select Scr          | reen     |
| CPU      | Speed          |          |          | 2418     | MHz      | <b>↑</b> ↓: Select Item |          |
| 64-bi    | it             |          |          | Supp     | orted    | Enter: Select           |          |
|          |                |          |          |          |          | +/- : Change Op         | t        |
| Activ    | e Processor (  | Cores    |          | [AII]    |          | F1: General Hel         | р        |
| Exec     | ute Disable E  | Bit      |          | [Enabl   | ed]      | F2: Previous Va         | lues     |
| Intel    | Virtualization | Technolo | ogy      | [Enabl   | ed]      | F3: Optimized E         | Defaults |
|          |                |          |          |          |          | F4: Save & Res          | et       |
|          |                |          |          |          |          | ESC: Exit               |          |

#### **2.5 Processor Information**

| Field Name    | Processor Information  |  |
|---------------|------------------------|--|
|               |                        |  |
| Field Name    | CPU Signature          |  |
| Default Value | Displays CPU Signature |  |

| Default Value | Displays CPU Signature  |
|---------------|---|
| Comment       | This field is not selectable. There is no help text associated with i |

| Field Name    | Microcode Patch   |
|---------------|---|
| Default Value | CPU Microcode Patch Revision  |
| Comment       | This field is not selectable. There is no help text associated with i |

| Field Name    | Max CPU Speed   |
|---------------|---|
| Default Value | Displays the Max CPU Speed  |
| Comment       | This field is not selectable. There is no help text associated with i |

| Field Name    | Min CPU Speed   |
|---------------|---|
| Default Value | Displays the Min CPU Speed  |
| Comment       | This field is not selectable. There is no help text associated with i |

| Field Name    | Processor Cores  |
|---------------|--|
| Default Value | Displays number of cores.  |
| Comment       | This field is not selectable. There is no help text associated with it |

| Field Name    | Intel HT Technology   |
|---------------|---|
| Default Value | When Hyper-threading is enabled, 2 logical CPUS per core is             |
|               | present.  |
| Comment       | This field is not selectable. There is no help text associated with it. |

| Field Name    | Intel VT-x Technology   |
|---------------|---|
| Default Value | CPU VMX hardware support for virtual machines.                          |
| Comment       | This field is not selectable. There is no help text associated with it. |

| Field Name    | L1 Data Cache   |
|---------------|---|
| Default Value | L1 Data Cache Size  |
| Comment       | This field is not selectable. There is no help text associated with i |

| Field Name    | L1 Code Cache   |
|---------------|---|
| Default Value | L1 Code Cache Size  |
| Comment       | This field is not selectable. There is no help text associated with it. |

| Field Name    | L2 Cache  |
|---------------|---|
| Default Value | L2 Cache Size   |
| Comment       | This field is not selectable. There is no help text associated with it. |

| Field Name    | L3 Cache   |
|---------------|--|
| Default Value | L3 Cache Size  |
| Comment       | This field is not selectable. There is no help text associated with it |

| Field Name    | CPU Speed   |
|---------------|---|
| Default Value | Displays the CPU Speed  |
| Comment       | This field is not selectable. There is no help text associated with i |

| Field Name    | 64-bit  |
|---------------|---|
| Default Value | Displays if 64-bit supported  |
| Comment       | This field is not selectable. There is no help text associated with i |

| Field Name     | Active Processor Cores                               |
|----------------|--|
| Default Value  | [All]  |
| Possible Value | All  |
|                | 1  |
| Help           | Number of cores to enable in each processor package. |

| Field Name     | Execute Disable Bit   |
|----------------|---|
| Default Value  | [Enabled]   |
| Possible Value | Enabled   |
|                | Disabled  |
| Help           | XD can prevent certain classes of malicious buffer overflow |
|                | attacks when combined with a supporting OS (Windows Server  |
|                | 2003 SP1, Windows XP SP2, SuSE Linux 9.2, RedHat Enterprise |
|                | 3 Update 3.)  |

| Field Name     | Intel Virtualization Technology                         |
|----------------|---|
| Default Value  | [Enabled]   |
| Possible Value | Enabled   |
|                | Disabled  |
| Help           | When enabled, a VMM can utilize the additional hardware |
|                | capabilities provided by Vanderpool Techonlogy.         |

#### 2.6 PPM Configuration

| Main Advanced Device     | Chipset | Security | Boot | Save & Exit            |
|--------------------------|---------|----------|------|------------------------|
| <b>PPM Configuration</b> |         |          |      | Item help              |
|                          |         |          |      |                        |
| EIST                     |         | [Enab    | led] |                        |
| CPU C state Report       |         | [Enab    | led] |                        |
| Enhanced C state         |         | [Enab    | led] |                        |
| Max CPU C-state          |         | [ C7]    |      |                        |
|                          |         |          |      |                        |
|                          |         |          |      |                        |
|                          |         |          |      | →←: Select Screen      |
|                          |         |          |      | <b>↑↓: Select Item</b> |
|                          |         |          |      | Enter: Select          |
|                          |         |          |      | +/- : Change Opt       |
|                          |         |          |      | F1: General Help       |
|                          |         |          |      | F2: Previous Values    |
|                          |         |          |      | F3: Optimized Defaults |
|                          |         |          |      | F4: Save & Reset       |
|                          |         |          |      | ESC: Exit              |

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| Field | Name |  |
|-------|------|--|

**PPM** Configuration

| Field Name     | EIST                            |
|----------------|---------------------------------|
| Default Value  | [Enabled]                       |
| Possible Value | Disabled / Enabled              |
| Help           | Enable/Disable Intel SpeedStep. |

| Field Name     | CPU C state Report                       |
|----------------|--|
| Default Value  | [Enabled]                                |
| Possible Value | Disabled / Enabled                       |
| Help           | Enable/Disable CPU C state report to OS. |

| Field Name     | Enhanced C state                    |
|----------------|-------------------------------------|
| Default Value  | [Disabled]                          |
| Possible Value | Disabled / Enabled                  |
| Help           | Enable/Disable Enhanced CPU C state |

| Field Name     | Max CPU C-state   |
|----------------|---|
| Default Value  | [C7]  |
| Possible Value | C7 / C6   |
| Help           | This option control Max C state that the processor will support |

#### 2.7 SATA Configuration

| Main <mark>Advanced</mark> Chipset B | Boot Security | Save & Exit |                        |
|--------------------------------------|---------------|-------------|------------------------|
| SATA Configuration                   |               |             | ltem help              |
|                                      |               |             |                        |
| Serial-ATA (SATA)                    | [Ena          | abled]      |                        |
|                                      |               |             |                        |
| SAIA mode                            | [AH           | ICI Mode]   |                        |
| Serial-ATA Port 0                    | [En           | abled]      |                        |
| Serial-ATA Port 1                    | [En           | abled]      |                        |
|                                      |               |             |                        |
| SATA Port0                           |               |             | →←: Select Screen      |
| Not Present                          |               |             | ↑↓: Select Item        |
|                                      |               |             | Enter: Select          |
| SATA Port1                           |               |             | +/- : Change Opt       |
| INTEL SSDSC2BW (120.0GB)             | )             |             | F1: General Help       |
|                                      |               |             | F2: Previous Values    |
|                                      |               |             | F3: Optimized Defaults |
|                                      |               |             | F4: Save & Reset       |
|                                      |               |             | ESC: Exit              |

| Field Name     | Serial-ATA (SATA)           |
|----------------|-----------------------------|
| Default Value  | [Enabled]                   |
| Possible Value | Enabled / Disable           |
| Help           | Enable / Disable Serial ATA |

| Field Name     | SATA Mode            |
|----------------|----------------------|
| Default Value  | [AHCI Mode]          |
| Possible Value | IDE Mode / AHCI Mode |
| Help           | Select IDE / AHCI    |

| Field Name     | Serial-ATA Port 0                  |
|----------------|------------------------------------|
| Default Value  | [Enabled]                          |
| Possible Value | Enabled / Disable                  |
| Help           | Enable / Disable Serial ATA Port 0 |

| Field Name Serial-ATA Port 1 |
|------------------------------|
|------------------------------|

| Default Value  | [Enabled]                          |
|----------------|------------------------------------|
| Possible Value | Enabled / Disable                  |
| Help           | Enable / Disable Serial ATA Port 1 |

| Field Name     | Serial ATA Port 0      |
|----------------|------------------------|
| Default Value  | Not Present            |
| Possible Value | SATA Device Model Name |

| Field Name     | Serial ATA Port 1      |
|----------------|------------------------|
| Default Value  | Not Present            |
| Possible Value | SATA Device Model Name |

## 2.8 Network Stack Configuration

| Main   | Advanced      | Device      | Chipset         | Secur Boot               | Save & Exit            |
|--------|---------------|-------------|-----------------|--------------------------|------------------------|
| Netwo  | rk Stack      |             |                 | [Disabled]               | ltem help              |
| Inv4 P | XE Support    |             |                 | [Enabled]                |                        |
| Inv6 P | XE Support    |             |                 | [Enabled]                |                        |
| DYE h  | oot wait time |             |                 |                          |                        |
|        | oot wait time |             |                 | 0                        |                        |
|        |               |             |                 |                          |                        |
|        |               |             |                 |                          |                        |
|        |               |             |                 |                          |                        |
|        |               |             |                 |                          |                        |
|        |               |             |                 |                          |                        |
|        |               |             |                 |                          | →←: Select Screen      |
|        |               |             |                 |                          | ↑↓: Select Item        |
|        |               |             |                 |                          | Enter: Select          |
|        |               |             |                 |                          | +/- : Change Opt       |
|        |               |             |                 |                          | F1: General Help       |
|        |               |             |                 |                          | F2: Previous Values    |
|        |               |             |                 |                          | F3: Optimized Defaults |
|        |               |             |                 |                          | F4: Save & Reset       |
|        |               |             |                 |                          | ESC: Exit              |
|        | Vers          | sion 2 15 1 | 326 Convright ( | C) 2012 American Megatre | nds Inc                |

| Field Name     | Network Stack                     |
|----------------|-----------------------------------|
| Default Value  | [Disabled]                        |
| Possible Value | Disabled                          |
|                | Enabled                           |
| Help           | Enable/Disable UEFI Network Stack |

| Field Name     | Ipv4 PXE Support   |
|----------------|--|
| Default Value  | [Enabled]  |
| Possible Value | Disabled   |
|                | Enabled  |
| Help           | Enable Ipv4 PXE Boot Support. If disabled IPV4 PXE boot option |
|                | will not be created.   |

| Default Value  | [Enabled]  |
|----------------|--|
| Possible Value | Disabled   |
|                | Enabled  |
| Help           | Enable Ipv6 PXE Boot Support. If disabled IPV6 PXE boot option |
|                | will not be created.   |

| Field Name     | PXE boot wait time                               |
|----------------|--|
| Default Value  | [0]  |
| Possible Value | 0~5  |
| Help           | Wait time to press ESC key to abort the PXE boot |

## 2.9 CSM Configuration

| Main Advanced Device         | e Chipset | Secur Boot        | Save & Exit            |
|------------------------------|-----------|-------------------|------------------------|
|                              |           | ity               |                        |
| Compatibility Support Module |           |                   | Item help              |
| Configuration                |           |                   |                        |
|                              |           |                   |                        |
| CSM Support                  |           | [Disabled]        |                        |
| CSM Madula Varaian           |           | 44.00             |                        |
|                              |           | 41.32             |                        |
| GateA20 Active               |           | [Upon Request]    |                        |
| Option ROM Message           |           | [Force BIOS]      |                        |
| INT19 Trap Response          |           | [Immediate]       |                        |
|                              |           |                   |                        |
| Boot option filter           |           | [UEFI and Legacy] | →←: Select Screen      |
|                              |           |                   | 1↓: Select Item        |
| Option ROM execution         | order     |                   | Enter: Select          |
|                              |           |                   | +/- : Change Opt       |
| Network                      |           | [UEFI only]       | F1: General Help       |
| Storage                      |           | [UEFI only]       | F2: Previous Values    |
| Video                        |           | [UEFI first]      | F3: Optimized Defaults |
| Other PCI devices            |           | [UEFI first]      | F4: Save & Reset       |
|                              |           |                   | ESC: Exit              |

| Field Name | Compatibility Support Module Configuration |
|------------|--|
|            |  |

| Field Name     | CSM Support                   |
|----------------|-------------------------------|
| Default Value  | [Disabled]                    |
| Possible Value | Disabled                      |
|                | Enabled                       |
| Help           | Enable / Disable CSM Support. |

| Field Name    | CSM16 Module Version  |
|---------------|---|
| Default Value | 41.32   |
| Comment       | This field is not selectable. There is no help text associated with i |

| Field Name     | GateA20 Active   |  |
|----------------|--|--|
| Default Value  | [Upon Request]   |  |
| Possible Value | Upon Request   |  |
|                | Always   |  |
| Help           | UPON REQUEST - GA20 can be disabled using BIOS services.         |  |
|                | ALWAYS - do not allow disabling GA20; this option is useful wher |  |
|                | any RT code is executed above 1MB                                |  |

| Field Name     | Option ROM Message              |  |
|----------------|---------------------------------|--|
| Default Value  | [Force BIOS]                    |  |
| Possible Value | Force BIOS                      |  |
|                | Keep Current                    |  |
| Help           | Set display mode for Option ROM |  |

| Field Name     | INT19 Trap Response  |  |
|----------------|--|--|
| Default Value  | [Immediate]  |  |
| Possible Value | Immediate  |  |
|                | Postponed  |  |
| Help           | BIOS reaction on INT19 trapping by Option ROM: IMMEDIATE - |  |
|                | execute the trap right away; POSTPONED - execute the trap  |  |
|                | during legacy boot.  |  |

| Field Name | Compatibility Support Module Configuration |
|------------|--|
|            |  |

| Field Name     | Network   |  |
|----------------|---|--|
| Default Value  | [UEFI only]   |  |
| Possible Value | Do not launch                                       |  |
|                | UEFI only   |  |
|                | Legacy only   |  |
|                | Legacy first  |  |
|                | UEFI first  |  |
| Help           | Controls the execution of UEFI and Legacy PXE OpROM |  |

| Field Name     | Storage       |  |
|----------------|---------------|--|
| Default Value  | [UEFI only]   |  |
| Possible Value | Do not launch |  |
|                | UEFI only     |  |

|      | Legacy only   |
|------|---|
|      | Legacy first  |
|      | UEFI first  |
| Help | Controls the execution of UEFI and Legacy Storage OpROM |

| Field Name     | Video   |  |  |
|----------------|---|--|--|
| Default Value  | [UEFI first]  |  |  |
| Possible Value | Do not launch   |  |  |
|                | UEFI only   |  |  |
|                | Legacy only   |  |  |
|                | Legacy first  |  |  |
|                | UEFI first  |  |  |
| Help           | Controls the execution of UEFI and Legacy Video OpROM |  |  |

| Field Name     | Other PCI devices  |  |  |  |
|----------------|--|--|--|--|
| Default Value  | [UEFI first]   |  |  |  |
| Possible Value | Do not launch  |  |  |  |
|                | UEFI only  |  |  |  |
|                | Legacy only  |  |  |  |
|                | Legacy first   |  |  |  |
|                | UEFI first   |  |  |  |
| Help           | Determines OpROM execution policy for devices other than |  |  |  |
|                | Network, Storage, or Video                               |  |  |  |

#### 2.10 USB Configuration

| Main | Advanced      | Device      | Chipset     | Security     | Boot       | Save & Exit            |
|------|---------------|-------------|-------------|--------------|------------|------------------------|
| USB  | Configuration | on          |             |              |            | Item help              |
| USB  | Devices       |             |             | 8.10.27      |            |                        |
|      |               |             |             |              |            |                        |
| USB  | Devices:      |             |             |              |            |                        |
|      | 1 Keyboard,   | 1 Mouse     | e, 2 Hubs   |              |            |                        |
|      |               |             |             |              |            |                        |
| Lega | icy USB Supp  | oort        |             | [Ena         | abled]     | →←: Select Screen      |
| USB  | 3.0 Support   |             |             | [Ena         | abled]     | ↑↓: Select Item        |
| XHC  | I Hand-off    |             |             | [Ena         | abled]     | Enter: Select          |
| EHC  | I Hand-off    |             |             | [Dis         | abled]     | +/- : Change Opt       |
| USB  | Mass Storag   | e Driver    | Support     | [Ena         | abled]     | F1: General Help       |
|      |               |             |             |              |            | F2: Previous Values    |
|      |               |             |             |              |            | F3: Optimized Defaults |
|      |               |             |             |              |            | F4: Save & Reset       |
|      |               |             |             |              |            | ESC: Exit              |
|      |               |             |             |              |            |                        |
|      |               |             |             |              |            |                        |
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Field Name

USB Configuration

| Field Name    | USB Module Version  |
|---------------|---|
| Default Value | USB module version  |
| Comment       | This field is not selectable. There is no help text associated with i |

| Field Name    | USB Devices:   |
|---------------|--|
| Default Value | Connect USB device type  |
| Comment       | This field is not selectable. There is no help text associated with it |

| Field Name     | Legacy USB Support |
|----------------|--------------------|
| Default Value  | [Enabled]          |
| Possible Value | Disabled           |
|                | Enabled            |
|                | Auto               |

| Help | Enables Legacy USB support. AUTO option disables legacy      |
|------|--|
|      | support if no USB devices are connected. DISABLE option will |
|      | keep USB devices available only for EFI applications.        |

| Field Name     | USB3.0 Support                                   |
|----------------|--|
| Default Value  | [Enabled]  |
| Possible Value | Disabled   |
|                | Enabled  |
| Help           | Enable/Disable USB3.0 (XHCI) Controller support. |

| Field Name     | XHCI Hand-off  |
|----------------|--|
| Default Value  | [Enabled]  |
| Possible Value | Disabled   |
|                | Enabled  |
| Help           | This is a workaround for OSes without XHCI hand-off support. |
|                | The XHCI ownership change should be claimed by XHCI driver.  |

| Field Name     | EHCI Hand-off  |
|----------------|--|
| Default Value  | [Disabled]   |
| Possible Value | Disabled   |
|                | Enabled  |
| Help           | This is a workaround for OSes without EHCI hand-off support. |
|                | The EHCI ownership change should be claimed by EHCI driver.  |

| Field Name     | USB Mass Storage Driver Support                 |
|----------------|---|
| Default Value  | [Enabled]                                       |
| Possible Value | Disabled  |
|                | Enabled   |
| Help           | Enable/Disable USB Mass Storage Driver Support. |

| 2.11 Occurity Conligui      |           |              |            |                        |
|-----------------------------|-----------|--------------|------------|------------------------|
| Main Advanced Device C      | hipset    | Security     | Boot       | Save & Exit            |
| Intel(R) TXE Configuration  |           |              |            | ltem help              |
| TXE                         |           | [Ena         | abled]     |                        |
| TXE HMRFPO                  |           | [Dis         | abled]     |                        |
| TXE Firmware Update         |           | [Dis         | abled]     |                        |
| TXE EOP Message             |           | [Ena         | abled]     |                        |
| TXE Unconfiguration Perform | n         |              |            |                        |
|                             |           |              |            |                        |
| Intel(R) TXE Configuration  |           |              |            |                        |
| TXE HMRFPO                  |           | [Dis         | abled]     | →←: Select Screen      |
| TXE HMRFPO                  |           | [Ena         | abled]     | ↑↓: Select Item        |
| Intel(R) TXE Configuration  |           | [Dis         | able]      | Enter: Select          |
|                             |           |              |            | +/- : Change Opt       |
|                             |           |              |            | F1: General Help       |
|                             |           |              |            | F2: Previous Values    |
|                             |           |              |            | F3: Optimized Defaults |
|                             |           |              |            | F4: Save & Reset       |
|                             |           |              |            | ESC: Exit              |
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#### 2.11 Security Configuration

Field Name

Intel(R) TXE Configuration

| Field Name     | ТХЕ       |
|----------------|-----------|
| Default Value  | [Enabled] |
| Possible Value | Disabled  |
|                | Enabled   |
| Help           |           |

| Field Name     | TXE HMRFPO |
|----------------|------------|
| Default Value  | [Disabled] |
| Possible Value | Disabled   |
|                | Enabled    |
| Help           |            |

| Field Name    | TXE Firmware Update |
|---------------|---------------------|
| Default Value | [Disabled]          |

| Possible Value | Disabled |
|----------------|----------|
|                | Enabled  |
| Help           |          |

| Field Name     | TXE EOP Message                 |
|----------------|---------------------------------|
| Default Value  | [Enabled]                       |
| Possible Value | Disabled                        |
|                | Enabled                         |
| Help           | Send EOP Message Befor Enter OS |

| Field Name    | TXE Unconfiguration Perform             |
|---------------|---|
| Default Value |   |
| Help          | Revert TXE settings to factory defaults |

| Field Name | Intel(R) Anti-Theft Technology Configuration |
|------------|--|
|------------|--|

| Field Name     | Intel(R) AT                             |
|----------------|---|
| Default Value  | [Disabled]                              |
| Possible Value | Disabled                                |
|                | Enabled                                 |
| Help           | Enable/Disable BIOS AT Code from Runing |

| Field Name     | Intel(R) AT Platform PBA                |
|----------------|---|
| Default Value  | [Enabled]                               |
| Possible Value | Disabled                                |
|                | Enabled                                 |
| Help           | Enable/Disable BIOS AT Code from Runing |

| Field Name     | Intel(R) AT Suspend Mode                                     |
|----------------|--|
| Default Value  | [Disabled]   |
| Possible Value | Disabled   |
|                | Enabled  |
| Help           | Request that platform enter AT Suspend Mode - Only Available |
|                | when AT Enrolled   |

## 3. Device Page

| Main Advanced   | Device Chipset        | Security      | Boot     | Save & Exit            |
|-----------------|-----------------------|---------------|----------|------------------------|
| AC Power Loss   | State                 | [Last State   | e]       | ltem help              |
| Wireless RF     |                       | [Enabled]     |          |                        |
| Onboard Lan 0 ( | Controller            | [Enabled]     |          |                        |
| Wake On Lan     | from Lan 0            | [Enab         | led]     |                        |
|                 |                       |               |          | →←: Select Screen      |
| Onboard Lan 1 ( | Controller            | [Enabled]     |          | ↑↓: Select Item        |
| Wake On Lan     | from Lan 1            | [Enabled]     |          | Enter: Select          |
|                 |                       |               |          | +/- : Change Opt       |
| ► H/W Monitor   |                       |               |          | F1: General Help       |
| ►TXE Subsystem  |                       |               |          | F2: Previous Values    |
|                 |                       |               |          | F3: Optimized Defaults |
|                 |                       |               |          | F4: Save & Reset       |
|                 |                       |               |          | ESC: Exit              |
| Ver             | sion 2.15.1326. Copyr | ight (C) 2012 | American | Megatrends Inc         |

| Field Name     | AC Power Loss State             |
|----------------|---------------------------------|
| Default Value  | [Last State]                    |
| Possible Value | Power off                       |
|                | Power on                        |
|                | Last State                      |
| Help           | Set the state after power loss. |

| Field Name     | Wireless RF                    |
|----------------|--------------------------------|
| Default Value  | [Enabled]                      |
| Possible Value | Disabled                       |
|                | Enabled                        |
| Help           | Enable or disable Wireless RF. |

| Field Name     | Onboard LAN 0 Controller |
|----------------|--------------------------|
| Default Value  | [Enabled]                |
| Possible Value | Disabled                 |
|                | Enabled                  |

| Help | Enable or disable onboard NIC. |
|------|--------------------------------|
|------|--------------------------------|

| Field Name     | Wake On LAN from LAN 0                   |
|----------------|--|
| Default Value  | [Enabled]                                |
| Possible Value | Disabled                                 |
|                | Enabled                                  |
| Help           | Enable or disable WOL from LAN 0 Device. |

| Field Name     | Onboard LAN 1 Controller       |
|----------------|--------------------------------|
| Default Value  | [Enabled]                      |
| Possible Value | Disabled                       |
|                | Enabled                        |
| Help           | Enable or disable onboard NIC. |

| Field Name     | Wake On LAN from LAN 1                   |  |
|----------------|--|--|
| Default Value  | [Enabled]                                |  |
| Possible Value | Disabled                                 |  |
|                | Enabled                                  |  |
| Help           | Enable or disable WOL from LAN 1 Device. |  |

| Field Name | H/W Monitor   |
|------------|---|
| Help       | Monitor hardware status                                       |
| Comment    | Press Enter when selected to go into the associated Sub-Menu. |

| Field Name | TXE Subsystem   |
|------------|---|
| Help       | Intel Trusted Execution Engine Parameters                     |
| Comment    | Press Enter when selected to go into the associated Sub-Menu. |

#### 3.1 H/W Monitor

| Main Advanced  | Device | Chipset | Security   | Boot | Save & Exit            |
|--|--------|---------|------------|------|------------------------|
| PC Health Statu  | S      |         |            |      | Item help              |
|  |        |         |            |      |                        |
| CPU temperatur   | e      |         | : +32      |      |                        |
| SO-DMII temper   | ature  |         | : +32      |      |                        |
| VR temperature   |        |         | : +32      |      | →←: Select Screen      |
| SOC_CPU Volt   |        |         | : +x.xxx V |      | ↑↓: Select Item        |
| SOC_CORE Vol   | :      |         | : +x.xxx V |      | Enter: Select          |
| SOC_I/O Volt   |        |         | : +x.xxx   | V    | +/- : Change Opt       |
| Adapter Volt   |        |         | : +x.xxx V |      | F1: General Help       |
| DDR_MEM Volt   |        |         | : +x.xxx V |      | F2: Previous Values    |
|  |        |         |            |      | F3: Optimized Defaults |
|  |        |         |            |      | F4: Save & Reset       |
|  |        |         |            |      | ESC: Exit              |
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| Field Name | PC Health Status |  |  |
|------------|------------------|--|--|
|            |                  |  |  |

| Field Name     | CPU temperature      |
|----------------|----------------------|
| Possible Value | Show CPU temperature |

| Field Name     | SO-DIMM temperature      |
|----------------|--------------------------|
| Possible Value | Show SO-DIMM temperature |

| Field Name     | VR temperature      |
|----------------|---------------------|
| Possible Value | Show VR temperature |

| Field Name     | SOC_CPU Volt.     |
|----------------|-------------------|
| Possible Value | Show SOC_CPU Volt |

| Field Name     | SOC_CORE Volt.     |
|----------------|--------------------|
| Possible Value | Show SOC_CORE Volt |

| Field Name     | SOC_I/O Volt.     |
|----------------|-------------------|
| Possible Value | Show SOC_I/O Volt |

| Field Name     | Adapter Volt.     |
|----------------|-------------------|
| Possible Value | Show Adapter Volt |

| Field Name     | DDR_MEM Volt.     |
|----------------|-------------------|
| Possible Value | Show DDR_MEM Volt |

## **3.2** TXE Subsystem

| Main Advanced          | Device       | Chipset    | Security       | Boot      | Save & Exit            |
|------------------------|--------------|------------|----------------|-----------|------------------------|
| <b>TXE</b> Information |              |            |                |           | ltem help              |
| Sec RC Versio          |              |            | 00.05.00.0     | 0         |                        |
| <b>TXE FW Version</b>  |              |            | 1.00.02.10     | 60        |                        |
|                        |              |            |                |           |                        |
|                        |              |            |                |           | →←: Select Screen      |
|                        |              |            |                |           | ↑↓: Select Item        |
|                        |              |            |                |           | Enter: Select          |
|                        |              |            |                |           | +/- : Change Opt       |
|                        |              |            |                |           | F1: General Help       |
|                        |              |            |                |           | F2: Previous Values    |
|                        |              |            |                |           | F3: Optimized Defaults |
|                        |              |            |                |           | F4: Save & Reset       |
|                        |              |            |                |           | ESC: Exit              |
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| Field Name | TXE Information |
|------------|-----------------|
|            |                 |

| Field Name     | Sec RC Version      |
|----------------|---------------------|
| Possible Value | Show Sec RC Version |

| Field Name     | TXE FW Version      |
|----------------|---------------------|
| Possible Value | Show TXE FW Version |

## 4. Chipset Page

| Main   | Advanced      | Device       | Chipset      | Security      | Boot            | Save & Exit            |
|--------|---------------|--------------|--------------|---------------|-----------------|------------------------|
| Memo   | ory Informat  | ion          |              |               |                 | ltem help              |
|        |               |              |              |               |                 |                        |
| Total  | Memory        |              |              | 8192 MB       | (LPDDR3)        |                        |
|        |               |              |              |               |                 |                        |
| Memo   | ory Slot0     |              |              | 4096 MB       | (LPDDR3)        | →←: Select Screen      |
| Memo   | ory Slot1     |              |              | 4096 MB       | (LPDDR3)        | ↑↓: Select Item        |
|        |               |              |              |               |                 | Enter: Select          |
| DVM    | F Pre-Allocat | ed           |              | [64MB]        |                 | +/- : Change Opt       |
| DVM    | Total Gfx M   | em           |              | [256MB]       |                 | F1: General Help       |
|        |               |              |              |               |                 | F2: Previous Values    |
| Audio  | Controller    |              |              | [Enable]      |                 | F3: Optimized Defaults |
| Azalia | a HDMI Code   | ec           |              | [Enable]      |                 | F4: Save & Reset       |
|        |               |              |              |               |                 | ESC: Exit              |
| USB I  | Per Port Con  | trol         |              | [Enak         |                 |                        |
|        |               |              |              | [Enar         | nel             |                        |
| USB I  | Port 0        |              |              | [Enable]      |                 |                        |
| USB I  | Port 1        |              |              | [Enable]      |                 |                        |
| USBI   | Port 2        |              |              | [Enable]      |                 |                        |
| USB I  | Port 3~5      |              |              | [Enable]      |                 |                        |
|        |               |              |              |               |                 |                        |
| High I | Precision Tim | ner          |              | [Enable]      |                 |                        |
|        |               |              |              |               |                 |                        |
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| Field Name | Memory Information |
|------------|--------------------|

| Field Name     | Total Memory                        |
|----------------|-------------------------------------|
| Possible Value | Show current total memory in system |

| Field Name     | Memory Slot0                          |
|----------------|---------------------------------------|
| Possible Value | Show current memory slot0 information |

| Field Name     | Memory Slot1                          |
|----------------|---------------------------------------|
| Possible Value | Show current memory slot1 information |

| Field Name     | DVMT Pre-Allocated   |
|----------------|--|
| Default Value  | [64MB]   |
| Possible Value | 64MB / 96MB / 128MB / 256MB / 384MB                        |
| Help           | Select DVMT 5.0 Pre-Allocated (Fixed) Graphics Memory size |
|                | used by the Internal Graphics Device.                      |

| Field Name     | DVMT Total Gfx Mem   |
|----------------|--|
| Default Value  | [256MB]  |
| Possible Value | 128MB / 256MB / Max  |
| Help           | Select DVMT 5.0 Total Graphic Memory size used by the Internal |
|                | Graphics Device.   |

| Field Name     | Audio Controller   |  |  |  |
|----------------|--|--|--|--|
| Default Value  | [Enabled]  |  |  |  |
| Possible Value | Disabled   |  |  |  |
|                | Enabled  |  |  |  |
| Help           | Control Detection of the Azalia device. Disabled = Azalia will be  |  |  |  |
|                | unconditionally disabled. Enabled = Azalia will be unconditionally |  |  |  |
|                | Enabled. Auto = Azalia will be enabled if present disabled         |  |  |  |
|                | otherwise.   |  |  |  |

| Field Name     | Azalia HDMI Codec                             |  |
|----------------|---|--|
| Default Value  | [Enabled]                                     |  |
| Possible Value | Disabled                                      |  |
|                | Enabled                                       |  |
| Help           | Enable/Disable internal HDMI codec for Azalia |  |

| Field Name     | USB Per Port Control  |  |  |
|----------------|---|--|--|
| Default Value  | [Enabled]   |  |  |
| Possible Value | Disabled  |  |  |
|                | Enabled   |  |  |
| Help           | Control each of the USB ports (0~3). Enable: Enable USB per |  |  |
|                | port; Disable: Use USB port X settings                      |  |  |

| Field Name     | USB Port 0 |
|----------------|------------|
| Default Value  | [Enabled]  |
| Possible Value | Disabled   |

|      | Enabled                     |
|------|-----------------------------|
| Help | Enable / Disable USB Port 0 |

| Field Name     | USB Port 1                  |  |
|----------------|-----------------------------|--|
| Default Value  | [Enabled]                   |  |
| Possible Value | Disabled                    |  |
|                | Enabled                     |  |
| Help           | Enable / Disable USB Port 1 |  |

| Field Name     | USB Port 2                  |  |
|----------------|-----------------------------|--|
| Default Value  | [Enabled]                   |  |
| Possible Value | Disabled                    |  |
|                | Enabled                     |  |
| Help           | Enable / Disable USB Port 2 |  |

| Field Name     | USB Port 3~5                  |
|----------------|-------------------------------|
| Default Value  | [Enabled]                     |
| Possible Value | Disabled                      |
|                | Enabled                       |
| Help           | Enable / Disable USB Port 3~5 |

| Field Name     | High Precision Timer                             |
|----------------|--|
| Default Value  | [Enabled]  |
| Possible Value | Disabled   |
|                | Enabled  |
| Help           | Enable or Disable the High Precision Event Timer |

## 5. Security

| Main  | Advanced                                    | Device       | Chipset       | Security       | Boot       | Save & Exit            |
|-------|---|--------------|---------------|----------------|------------|------------------------|
| Pas   | Password Description                        |              |               |                |            | ltem help              |
| If O  | If Only the Administrator's password is set |              |               |                |            |                        |
| ther  | n this only lim                             | its access   | to Setup      | and is         |            |                        |
| only  | asked for w                                 | hen enteri   | ng Setup      |                |            |                        |
| lf O  | NLY the Use                                 | r's passwo   | ord is set, t | hen this       |            |                        |
| ls a  | power on pa                                 | ssword ar    | nd must be    | entered to     |            |                        |
| boo   | t or enter Set                              | tup. In Set  | up the Use    | er will.       |            |                        |
| hav   | e Administrat                               | or rights.   |               |                |            |                        |
| The   | The password length must be                 |              |               |                |            | →←: Select Screen      |
| in th | ne following ra                             | ange:        |               |                |            | ↑↓: Select Item        |
| Mini  | imum Length                                 | I            |               | 3              |            | Enter: Select          |
| Max   | kimum Lengtl                                | า            |               | 20             |            | +/- : Change Opt       |
|       |   |              |               |                |            | F1: General Help       |
| Adn   | ninistrator Pa                              | issword      |               |                |            | F2: Previous Values    |
| Use   | er Password                                 |              |               |                |            | F3: Optimized Defaults |
|       |   |              |               |                |            | F4: Save & Reset       |
| HD    | HDD Security Configuration                  |              |               |                | ESC: Exit  |                        |
| P0:\  | NDC WD640                                   | AA0          |               |                |            |                        |
|       |   |              |               |                |            |                        |
| ► Sec | ure Boot mei                                | nu           |               |                |            |                        |
|       |   |              |               |                |            |                        |
|       |   |              |               |                |            | notionale la s         |
|       | Ver   | sion 2.15.13 | 526. Copyrie  | gnt (C) 2012 A | merican Me | gatrends, Inc.         |

| Field Name | Administrator Password  |
|------------|---|
| Help       | Set Administrator Password                                    |
| Comment    | Press Enter when selected to go into the associated Sub-Menu. |

| Field Name | User Password   |
|------------|---|
| Help       | Set Setup User Password.                                      |
|            | Note: Only can modify System Date, System Timer, I217, and    |
|            | I210 options if User Password.                                |
| Comment    | Press Enter when selected to go into the associated Sub-Menu. |

| Field Name | HDD Security Configuration: |
|------------|-----------------------------|
|------------|-----------------------------|

|         | P0: WDC WD6400AA  |
|---------|---|
| Help    | Set HDD password  |
| Comment | Press Enter when selected to go into the associated Sub-Menu. |

| Field Name | Secure Boot menu  |
|------------|---|
| Help       | Customizable Secure Boot settings.                            |
| Comment    | Press Enter when selected to go into the associated Sub-Menu. |

| 5.1 HDD Security Co         | nfiguratio | on            |                  |                        |
|-----------------------------|------------|---------------|------------------|------------------------|
| Main Advanced Chipset       | Boot       | Security      | Save & Exit      |                        |
| HDD Password Description    | 1          |               |                  | Item help              |
|                             |            |               |                  |                        |
| Allow Access to Set, Modify | / and Cl   | ear           |                  |                        |
| Hard Disk User and Master   | Passwo     | rd.           |                  |                        |
| User Password need to be    | installed  | for           |                  |                        |
| Enabling Security. Master F | Password   | can           |                  |                        |
| Be Modified only when suc   | cessfully  | unlocked      |                  |                        |
| With Master Password in P   | OST.       |               |                  |                        |
| HDD PASSWORD CONFIC         |            | N.            |                  |                        |
|                             |            |               |                  |                        |
| Security                    |            | Yes           |                  | →←: Select Screen      |
| Supported :                 |            |               |                  |                        |
| Security Enabled            | :          | No            |                  | 1↓: Select Item        |
| Security Locked             | :          | No            |                  | Enter: Select          |
| Security Frozen             | :          | No            |                  | +/- : Change Opt       |
| HDD User Pwd Status         |            | NOT INST      | ALLED            | F1: General Help       |
| HDD Master Pwd Status       |            | NOT INST      | ALLED            | F2: Previous Values    |
|                             |            |               |                  | F3: Optimized Defaults |
| Set User Password           |            |               |                  | F4: Save & Reset       |
|                             |            |               |                  | ESC: Exit              |
|                             |            |               |                  |                        |
|                             |            |               |                  |                        |
|                             |            |               |                  |                        |
|                             |            |               |                  |                        |
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| Field Name | Set User Password   |
|------------|---|
| Help       | Set HDD User Password   |
| Comment    | Press Enter when selected to go into the associated Sub-Menu. |

| System Mode       Setup         Secure Boot       Disabled         Secure Boot Support       [Disabled]         Secure Boot Mode       [Custom]         ▶ Key Management       →←: Select Screen         ↑↓: Select Item       Enter: Select         +/- : Change Opt       F1: General Help         F2: Previous Values       F3: Optimized Default         F4: Save & Reset       ESC: Exit | Main Advanced                   | Chipset   | Boot | Security          | Save & Exit |  |
|---|---------------------------------|-----------|------|-------------------|-------------|--|
| Secure Boot Support       [Disabled]         Secure Boot Mode       [Custom]         ▶ Key Management       →←: Select Screen         ↑↓: Select Item       Enter: Select         +/-: Change Opt       F1: General Help         F2: Previous Values       F3: Optimized Default         F4: Save & Reset       ESC: Exit   | System Mode<br>Secure Boot      |           |      | Setup<br>Disabled |             | ltem help  |
| Secure Boot Mode       [Custom]         ▶ Key Management       →←: Select Screen         ↑↓: Select Item       Enter: Select         +/- : Change Opt       F1: General Help         F2: Previous Values       F3: Optimized Default         F4: Save & Reset       ESC: Exit   | Secure Boot Sup                 | oport     |      | [Disabled]        |             |  |
| →: Select Screen<br>↑↓: Select Item<br>Enter: Select<br>+/- : Change Opt<br>F1: General Help<br>F2: Previous Values<br>F3: Optimized Default<br>F4: Save & Reset<br>ESC: Exit   | Secure Boot Mo<br>►Key Manageme | de<br>ent |      | [Custom]          |             |  |
|   |                                 |           |      |                   |             | →: Select Screen<br>↑↓: Select Item<br>Enter: Select<br>+/- : Change Opt<br>F1: General Help<br>F2: Previous Values<br>F3: Optimized Defaults<br>F4: Save & Reset<br>ESC: Exit |

#### 5.2 Secure Boot menu

| Field Name     | Secure Boot Control   |
|----------------|---|
| Default Value  | [Disabled]  |
| Possible Value | Enabled / Disabled  |
| Help           | Secure Boot can be enabled if 1.System running in User mode |
|                | with enrolled Platform Key(PK) 2.CSM function is disabled   |

| Field Name     | Secure Boot Mode   |
|----------------|--|
| Default Value  | [Custom]   |
| Possible Value | Standard / Custom  |
| Help           | Secure Boot mode selector. 'Custom' Mode allows physically   |
|                | present users ability to override Image Execution policy and |
|                | manage Secure Boot Keys.                                     |

| Main Adva  | inced        | Chipset     | Boot     | Security   | Save & Exit |                        |
|------------|--------------|-------------|----------|------------|-------------|------------------------|
| Default Ke | ey Pro∖      | isioning/   |          | [Disabled] |             | Item help              |
|            |              |             |          |            |             |                        |
| Enroll A   |              | ory Default | Keys     |            |             |                        |
| ► Save A   | II Secu      | ire Boot Va | riables  |            |             |                        |
| Platform k | (ev (Pł      | 0           |          | NOT INST   |             |                        |
| ► Delete F | чој (н<br>РК | ()          |          |            |             |                        |
| ► Set new  | / PK         |             |          |            |             |                        |
|            |              |             |          |            |             | →←: Select Screen      |
| Key Excha  | ange K       | ey Databa   | se (KEK) | NOT INST   | ALLED       | ↑↓: Select Item        |
| ► Delete   | KEK          |             |          |            |             | Enter: Select          |
| ► Set new  | / KEK        |             |          |            |             | +/- : Change Opt       |
| ► Append   | Var to       | KEK         |          |            |             | F1: General Help       |
|            |              |             |          |            |             | F2: Previous Values    |
| Authorized | d Signa      | ature       |          | NOT INST   | ALLED       | F3: Optimized Defaults |
| Database(D | B)           |             |          |            |             |                        |
| ► Delete [ | DВ           |             |          |            |             | F4: Save & Reset       |
| ► Set new  | / DB         |             |          |            |             | ESC: Exit              |
| ► Append   | Var to       | DB          |          |            |             |                        |
| Forbidden  | Signa        | iture Datab | ase(DRX  |            |             |                        |
| ► Delete [ |              |             |          |            |             |                        |
| ► Set new  | DBX          |             |          |            |             |                        |
| Append     | Var to       | DBX         |          |            |             |                        |
| , ppond    |              | / (         |          |            |             |                        |
|            |              |             |          |            |             |                        |

| Field Name     | Default Key Provisioning                                   |
|----------------|--|
| Default Value  | [Disabled]   |
| Possible Value | Enabled / Disabled   |
| Help           | Install Factory default Secure Boot Keys when System is in |
|                | Setup Mode.  |

| Field Name | Enroll All Factory Default Keys                         |
|------------|---|
| Help       | Force System to User Mode - install all Factory Default |

|         | keys(PK,KEK,db,dbx,dbt). Change takes effect after reboot. |
|---------|--|
| Comment |  |

| Field Name | Delete All Factory Default Key                        |
|------------|---|
| Help       | Force System to User Mode - clear all Factory Default |
|            | keys(PK,KEK,db,dbx). Change takes effect after reboot |
| Comment    |   |

| Field Name | Save All Secure Boot Variables                               |
|------------|--|
| Help       | Store content of each Secure Boot Variable(data formatted as |
|            | EFI_SIGNATURE_LIST) to a file with matching name on          |
|            | selected file system   |
| Comment    |  |

| Field Name | Delete PK  |
|------------|--|
| Help       | Delete the Variable from NVRAM. Removing PK will reset |
|            | System to Setup Mode                                   |
| Comment    |  |

| Field Name | Set new PK  |
|------------|---|
| Help       | Insert Factory Default Keys or load from a file formatted as: |
|            | 1.Public Key Certificate in:                                  |
|            | a)EFI_SIGNATURE_LIST,   |
|            | b)EFI_CERT_X509 (DER encoded),                                |
|            | c)EFI_CERT_RSA2048 (bin),                                     |
|            | d)EFI_CERT_SHA256 (bin)                                       |
|            | 2.Efi Time-Based Authenticated Variable                       |
| Comment    |   |

| Field Name | Delete KEK  |
|------------|---|
| Help       | Delete the Variable from NVRAM. Removing KEK will reset |
|            | System to Setup Mode                                    |
| Comment    |   |

| Field Name | Set new KEK   |
|------------|---|
| Help       | Insert Factory Default Keys or load from a file formatted as: |
|            | 1.Public Key Certificate in:                                  |

|         | a)EFI_SIGNATURE_LIST,                   |
|---------|---|
|         | b)EFI_CERT_X509 (DER encoded),          |
|         | c)EFI_CERT_RSA2048 (bin),               |
|         | d)EFI_CERT_SHA256 (bin)                 |
|         | 2.Efi Time-Based Authenticated Variable |
| Comment |   |

| Field Name | Append KEK  |
|------------|---|
| Help       | Insert Factory Default Keys or load from a file formatted as: |
|            | 1.Public Key Certificate in:                                  |
|            | a)EFI_SIGNATURE_LIST,   |
|            | b)EFI_CERT_X509 (DER encoded),                                |
|            | c)EFI_CERT_RSA2048 (bin),                                     |
|            | d)EFI_CERT_SHA256 (bin)                                       |
|            | 2.Efi Time-Based Authenticated Variable                       |
| Comment    |   |

| Field Name | Delete DB  |
|------------|--|
| Help       | Delete the Variable from NVRAM. Removing DB will reset |
|            | System to Setup Mode                                   |
| Comment    |  |

| Field Name | Set new DB  |
|------------|---|
| Help       | Insert Factory Default Keys or load from a file formatted as: |
|            | 1.Public Key Certificate in:                                  |
|            | a)EFI_SIGNATURE_LIST,   |
|            | b)EFI_CERT_X509 (DER encoded),                                |
|            | c)EFI_CERT_RSA2048 (bin),                                     |
|            | d)EFI_CERT_SHA256 (bin)                                       |
|            | 2.Efi Time-Based Authenticated Variable                       |
| Comment    |   |

| Field Name | Append DB   |
|------------|---|
| Help       | Insert Factory Default Keys or load from a file formatted as: |
|            | 1.Public Key Certificate in:                                  |
|            | a)EFI_SIGNATURE_LIST,   |
|            | b)EFI_CERT_X509 (DER encoded),                                |

|         | 2.Efi Time-Based Authenticated Variable |
|---------|---|
| Comment |   |

| Field Name | Delete DBX  |
|------------|---|
| Help       | Delete the Variable from NVRAM. Removing DBX will reset |
|            | System to Setup Mode                                    |
| Comment    |   |

| Field Name | Set new DBX   |
|------------|---|
| Help       | Insert Factory Default Keys or load from a file formatted as: |
|            | 1.Public Key Certificate in:                                  |
|            | a)EFI_SIGNATURE_LIST,   |
|            | b)EFI_CERT_X509 (DER encoded),                                |
|            | c)EFI_CERT_RSA2048 (bin),                                     |
|            | d)EFI_CERT_SHA256 (bin)                                       |
|            | 2.Efi Time-Based Authenticated Variable                       |
| Comment    |   |

| Field Name | Append DBX  |
|------------|---|
| Help       | Insert Factory Default Keys or load from a file formatted as: |
|            | 1.Public Key Certificate in:                                  |
|            | a)EFI_SIGNATURE_LIST,   |
|            | b)EFI_CERT_X509 (DER encoded),                                |
|            | c)EFI_CERT_RSA2048 (bin),                                     |
|            | d)EFI_CERT_SHA256 (bin)                                       |
|            | 2.Efi Time-Based Authenticated Variable                       |
| Comment    |   |

## 6. Boot

Boot mode select = UEFI

| Main Advanced Dev      | ice Chipset           | Security Boot              | Save & Exit            |
|------------------------|-----------------------|----------------------------|------------------------|
| Boot Configuration     |                       |                            | ltem help              |
| Setup Prompt Timeo     | ut                    | 3                          |                        |
| Bootup NumLock Sta     | ite                   | [On]                       |                        |
|                        |                       |                            |                        |
| Quiet Boot             |                       |                            |                        |
| Fast Boot              |                       |                            |                        |
| VGA Support            |                       | [EFI Driver]               |                        |
| USB Support            |                       | [Partial Initial]          |                        |
| PS2 Devices Suppo      | ort                   | [Enabled]                  |                        |
| Network Stack Drive    | er Support            | [Enabled]                  |                        |
| Alternate Boot Seque   | ence                  | [ <f12> Key]</f12>         |                        |
| Boot Other Device      |                       | [Disable]                  |                        |
|                        |                       |                            |                        |
| Boot Mode select       |                       | [UEFI]                     |                        |
|                        |                       |                            |                        |
| FIXED BOOT ORDE        | R Priorities          |                            |                        |
| Boot Option #1         |                       | [UEFI CD/DVD]              | →←: Select Screen      |
| Boot Option #2         |                       | [UEFI Hard Disk:Win.]      | ↑↓: Select Item        |
| Boot Option #3         |                       | [UEFI USB KEY]             | Enter: Select          |
| Boot Option #4         |                       | [UEFI Network]             | +/- : Change Opt       |
| Boot Option #5         |                       | [UEFI USB CD/DVD]          | F1: General Help       |
| Boot Option #6         |                       | [UEFI USB Hard Disk]       | F2: Previous Values    |
|                        |                       |                            | F3: Optimized Defaults |
| ► UEFI Hard Disk Drive | <b>BBS</b> Priorities |                            | F4: Save & Reset       |
|                        |                       |                            | ESC: Exit              |
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## Boot mode select = LEGACY

| Main Advanced Device Chipse  | et Security Boot   | Save & Exit            |
|------------------------------|--------------------|------------------------|
| Boot Configuration           |                    | ltem help              |
| Setup Prompt Timeout         | 3                  |                        |
| Bootup NumLock State         | [On]               |                        |
|                              |                    |                        |
| Quiet Boot                   | [Disable]          |                        |
| Fast Boot                    | [Enabled]          |                        |
| VGA Support                  | [EFI Driver]       |                        |
| USB Support                  | [Partial Initial]  |                        |
| PS2 Devices Support          | [Enabled]          |                        |
| Network Stack Driver Support | [Enabled]          |                        |
| Alternate Boot Sequence      | [ <f12> Key]</f12> |                        |
| Boot Other Device            | [Disable]          |                        |
|                              |                    |                        |
| Boot Mode select             | [LEGACY]           |                        |
| FIXED BOOT ORDER Priorities  |                    |                        |
| Boot Option #1               | [USB Floopy]       |                        |
| Boot Option #2               | [USB KEY]          |                        |
| Boot Option #3               | [USB Hard Disk]    | →←: Select Screen      |
| Boot Option #4               | [USB CD/DVD]       | ↑↓: Select Item        |
| Boot Option #5               | [Hard Disk]        | Enter: Select          |
| Boot Option #6               | [Network]          | +/- : Change Opt       |
|                              |                    | F1: General Help       |
|                              |                    | F2: Previous Values    |
|                              |                    | F3: Optimized Defaults |
|                              |                    | F4: Save & Reset       |

ESC: Exit

| Field Name     | Setup Prompt Timeout                                |
|----------------|---|
| Default Value  | [3]   |
| Possible Value | 1~65535   |
| Help           | Number of seconds to wait for setup activation key. |
|                | 65535(0xFFFF) means indefinite waiting.             |

| Field Name     | Boot NumLock State                |
|----------------|-----------------------------------|
| Default Value  | [On]                              |
| Possible Value | On                                |
|                | Off                               |
| Help           | Select the keyboard NumLock state |

| Field Name     | Quiet Boot                            |
|----------------|---------------------------------------|
| Default Value  | [Disabled]                            |
| Possible Value | Enabled                               |
|                | Disabled                              |
| Help           | Enables or disables Quiet Boot option |

| Field Name | Fast Boot |
|------------|-----------|
|------------|-----------|

| Default Value  | [Enabled]  |
|----------------|--|
| Possible Value | Enabled  |
|                | Disabled   |
| Help           | Enables or disables boot with initialization of a minimal set of |
|                | devices required to launch active boot option. Has no effect for |
|                | BBS boot options.  |

| Field Name     | VGA Support  |
|----------------|--|
| Default Value  | [EFI Driver]   |
| Possible Value | EFI Driver / Auto  |
| Help           | If Auto, only install Legacy OpRom with Legacy OS and logo         |
|                | would NOT be shown during post. Efi driver will still be installed |
|                | with EFI OS.   |

| Field Name     | USB Support   |
|----------------|---|
| Default Value  | [Partial Initial]   |
| Possible Value | Disable / Full Initial / Partial Initial                          |
| Help           | If Disabled, all USB devices will NOT be available until after OS |
|                | boot. If Partial Initial, USB Mass Storage and specific USB       |
|                | port/device will NOT be available before OS boot. If Enabled, all |
|                | USB devices will be available in OS and Post.                     |

| Field Name     | PS2 Devices Support                       |
|----------------|---|
| Default Value  | [Enabled]                                 |
| Possible Value | Enabled                                   |
|                | Disabled                                  |
| Help           | If Disabled, PS2 devices will be skipped. |

| Field Name     | NetWork Stack Driver Support                       |
|----------------|--|
| Default Value  | [Enabled]  |
| Possible Value | Enabled  |
|                | Disabled   |
| Help           | If Disabled, NetWork Stack Driver will be skipped. |

| Field Name    | Alternate Boot Sequence |
|---------------|-------------------------|
| Default Value | [ <f12> Key]</f12>      |

| Possible Value | Disable / <f12> Key</f12>  |
|----------------|--|
| Help           | Specifies whether a Magic Packet(TM) powering on the system,         |
|                | pressing <f12> during the POST, or both, will cause the normal</f12> |
|                | boot sequence to be skipped and a LAN-only boot to be                |
|                | attemped. If Boot Other Device is enabled, other boot devices        |
|                | are tried if LAN boot fails.   |

| Field Name     | Boot Other Device  |
|----------------|--|
| Default Value  | [Disabled]   |
| Possible Value | Enabled  |
|                | Disabled   |
| Help           | If enabled, the system will try booting all device categories if the |
|                | normal boot priority fails.  |

| Field Name     | Boot mode select   |
|----------------|--|
| Default Value  | [UEFI]   |
| Possible Value | LEGACY   |
|                | UEFI   |
| Help           | Secure Boot mode selector. 'Custom' Mode allows physically   |
|                | present users ability to override Image Execution policy and |
|                | manage Secure Boot Keys.                                     |

#### Boot mode select = UEFI, FIXED BOOT ORDER Priorities

| Field Name     | Boot Option #1   |
|----------------|--|
| Default Value  | [UEFI CD/DVD]  |
| Possible Value | UEFI CD/DVD, UEFI Hard Disk, UEFI USB KEY, UEFI Network, |
|                | UEFI USB CD/DVD, UEFI USB Hard Disk, Disabled.           |
| Help           | Sets the system boot order.                              |

| Field Name     | Boot Option #2   |
|----------------|--|
| Default Value  | [UEFI Hard Disk]   |
| Possible Value | UEFI CD/DVD, UEFI Hard Disk, UEFI USB KEY, UEFI Network, |
|                | UEFI USB CD/DVD, UEFI USB Hard Disk, Disabled.           |
| Help           | Sets the system boot order.                              |

| Field Name    | Boot Option #3 |
|---------------|----------------|
| Default Value | [UEFI USB Key] |

| Possible Value | UEFI CD/DVD, UEFI Hard Disk, UEFI USB KEY, UEFI Network, |
|----------------|--|
|                | UEFI USB CD/DVD,UEFI USB Hard Disk, Disabled.            |
| Help           | Sets the system boot order.                              |

| Field Name     | Boot Option #4   |
|----------------|--|
| Default Value  | [UEFI Network]   |
| Possible Value | UEFI CD/DVD, UEFI Hard Disk, UEFI USB KEY, UEFI Network, |
|                | UEFI USB CD/DVD,UEFI USB Hard Disk, Disabled.            |
| Help           | Sets the system boot order.                              |

| Field Name     | Boot Option #5   |
|----------------|--|
| Default Value  | [UEFI USB CD/DVD]  |
| Possible Value | UEFI CD/DVD, UEFI Hard Disk, UEFI USB KEY, UEFI Network, |
|                | UEFI USB CD/DVD, UEFI USB Hard Disk, Disabled.           |
| Help           | Sets the system boot order.                              |

| Field Name     | Boot Option #6   |
|----------------|--|
| Default Value  | [UEFI USB Hard Disk]                                     |
| Possible Value | UEFI CD/DVD, UEFI Hard Disk, UEFI USB KEY, UEFI Network, |
|                | UEFI USB CD/DVD,UEFI USB Hard Disk, Disabled.            |
| Help           | Sets the system boot order.                              |

#### Boot mode select = LEGACY, FIXED BOOT ORDER Priorities.

| Field Name     | Boot Option #1                                   |
|----------------|--|
| Default Value  | [CD/DVD]   |
| Possible Value | CD/DVD, Hard Disk, USB KEY, Network, USB CD/DVD, |
|                | USB Hard Disk, USB Floppy, Disabled.             |
| Help           | Sets the system boot order.                      |

| Field Name     | Boot Option #2                                   |
|----------------|--|
| Default Value  | [Hard Disk]                                      |
| Possible Value | CD/DVD, Hard Disk, USB KEY, Network, USB CD/DVD, |
|                | USB Hard Disk, USB Floppy, Disabled.             |
| Help           | Sets the system boot order.                      |

|--|

| Default Value  | [USB Key]  |  |  |
|----------------|--|--|--|
| Possible Value | CD/DVD, Hard Disk, USB KEY, Network, USB CD/DVD, |  |  |
|                | USB Hard Disk, USB Floppy, Disabled.             |  |  |
| Help           | Sets the system boor order.                      |  |  |

| Field Name     | Boot Option #4                                   |
|----------------|--|
| Default Value  | [Network]  |
| Possible Value | CD/DVD, Hard Disk, USB KEY, Network, USB CD/DVD, |
|                | USB Hard Disk, USB Floppy, Disabled.             |
| Help           | Sets the system boot order.                      |

| Field Name     | Boot Option #5                                   |
|----------------|--|
| Default Value  | [USB CD/DVD]                                     |
| Possible Value | CD/DVD, Hard Disk, USB KEY, Network, USB CD/DVD, |
|                | USB Hard Disk, USB Floppy, Disabled.             |
| Help           | Sets the system boot order.                      |

| Field Name     | Boot Option #6                                   |
|----------------|--|
| Default Value  | [USB Hard Disk]                                  |
| Possible Value | CD/DVD, Hard Disk, USB KEY, Network, USB CD/DVD, |
|                | USB Hard Disk, USB Floppy, Disabled.             |
| Help           | Sets the system boot order.                      |

| Field Name     | Boot Option #7                                   |
|----------------|--|
| Default Value  | [USB Floppy]                                     |
| Possible Value | CD/DVD, Hard Disk, USB KEY, Network, USB CD/DVD, |
|                | USB Hard Disk, USB Floppy, Disabled.             |
| Help           | Sets the system boot order.                      |

## 7. Save & Exit

| Main Advanced Device          | Chipset     | Secur | Save & Exit | Save & Exit            |
|-------------------------------|-------------|-------|-------------|------------------------|
|                               |             | ity   |             |                        |
| Save Changes and Exit         |             |       |             | Item help              |
| Discard Changes and Exit      |             |       |             |                        |
| Save Changes and Reset        |             |       |             |                        |
| Discard Changes and Reset     |             |       |             |                        |
|                               |             |       |             |                        |
| Save Options                  |             |       |             |                        |
| Restore user Defaults         |             |       |             |                        |
| Restore Defaults              |             |       |             |                        |
|                               |             |       |             |                        |
| Restore Defaults              |             |       |             |                        |
| Save as user Defaults         |             |       |             |                        |
| Restore user Defaults         |             |       |             | →←: Select Screen      |
|                               |             |       |             | ↑↓: Select Item        |
| Boot Override                 |             |       |             | Enter: Select          |
| UEFI: Built-in UEFI Shell     |             |       |             | +/- : Change Opt       |
| Windows Boot Manager          |             |       |             | F1: General Help       |
|                               |             |       |             | F2: Previous Values    |
| Launch EFI Shell from filesys | stem device |       |             | F3: Optimized Defaults |
| ► Reset System with ME disa   | ble Mode    |       |             | F4: Save & Reset       |
|                               |             |       |             | ESC: Exit              |
|                               |             |       |             |                        |

| Field Name | Save Changes and Exit                       |
|------------|---|
| Help       | Exit system setup after saving the changes. |
| Comment    |   |

| Field Name | Discard Changes and Exit                      |
|------------|---|
| Help       | Exit system setup without saving any changes. |
| Comment    |   |

| Field Name | Save Changes and Reset                     |
|------------|--|
| Help       | Reset the system after saving the changes. |
| Comment    |  |

| Field Name | Discard Changes and Reset                      |
|------------|--|
| Help       | Reset system setup without saving any changes. |
| Comment    |  |

| Field Name | Save Options |
|------------|--------------|
|------------|--------------|

| Field Name | Save Changes  |
|------------|---|
| Help       | Save Changes done so far to any of the setup options. |
| Comment    |   |

| Field Name | Discard Changes  |
|------------|--|
| Help       | Discard Changes done so far to any of the setup options. |
| Comment    |  |

| Field Name | Restore Defaults                                       |
|------------|--|
| Help       | Restore/Load Default values for all the setup options. |
| Comment    |  |

| Field Name | Save as User Defaults                          |
|------------|--|
| Help       | Save the changes done so far as User Defaults. |
| Comment    |  |

| Field Name | Restore User Defaults                               |
|------------|---|
| Help       | Restore the User Defaults to all the setup options. |
| Comment    |   |

|--|

| Field Name | Launch EFI Shell from filesystem device                              |
|------------|--|
| Help       | Attempts to Launch EFI Shell application (Shell.efi) from one of the |
|            | available filesystem devices   |
| Comment    |  |

| Field Name | Launch EFI Shell from filesystem device                                 |
|------------|---|
| Help       | Attempts to Launch EFI Shell application (Shellx64.efi) from one of the |

|         | available filesystem devices |
|---------|------------------------------|
| Comment |                              |

| Field Name | Reset System with ME disable Mode                                      |
|------------|--|
| Help       | ME will runs into the temporary disable mode, Ignore if ME Ignition FW |
| Comment    |  |

| Field Name | Restore user Defaults                               |
|------------|---|
| Help       | Restore the User Defaults to all the setup options. |
| Comment    |   |