

MITAC Desktop Board PD10AI

Product Guide

Desktop Board Features

This chapter briefly describes the features of Desktop Board PD10AI.
Below to summarizes the major features of the Desktop Board.

Feature Summary

TABLE: MiTAC DESKTOP BOARD PD10AI FEATURES

| | | |
|----------------------|---|---|
| Form Factor | Low-profile Mini-ITX (20 millimeters [0.79 inches] x 170.18 millimeters [6.7 inches] x 170.18 millimeters [6.7 inches]) | |
| Processor Chipset | Intel Apollo Lake Processor with integrated graphics (Compatible with N3350 and N4200) | |
| Main Memory | • Support for dual channel DDR3L 1866 SO-DIMMs | |
| | • Support for up to 8 GB of system memory on a single SO-DIMM (or 4 GB each by 2 SO-DIMM) | |
| | • 204-pin DDR3L SO-DIMM | 2 |
| Audio Controller | Realtek ALC283 audio codec | |
| Expansion Capability | • PCI Express 2.0 x1 add-in card connector | 1 |
| | • M.2 B KEY (2242/2260/2280) with USB2.0 and SATA III signal for SSD | 1 |
| | • M.2 E KEY (2230) with PCIex1 and USB2.0 signal for wireless | 1 |
| External I/O | • DC-in Jack | 1 |
| | • HD-out | 1 |
| | • DP-out | 1 |
| | • line-out | 1 |
| | • Mic-in | 1 |
| | • USB 3.0 back panel connectors | 4 |
| | • RJ45 | 2 |
| Internal I/O | • LVDS Connector (40Pin) | 1 |
| | • eDP Connector (40Pin) (colay with LVDS connector | 1 |
| | • Stereo speaker header | 1 |
| | • HD Audio/AC'97 headphone/mic | 1 |
| | • USB 2.0 front panel ports | 2 |
| | • SATA 3.0 Gb/s | 1 |
| | • SATA 3.0 Gb/s port (multiplexed with an m.2 B KEY slot) | 1 |
| | • Serial port header | 2 |
| | • Parallel port header (Option with MiAPI header) | 1 |
| | • 4-pin system fan header | 2 |
| | • 2 pin power connector | 1 |
| S I/O Controller | NCT6793D | |

| | |
|---------------------|---|
| LAN Support | Intel I211-AT (10/100/1000 Mb/s) Ethernet LAN controller *2 |
| BIOS | <ul style="list-style-type: none"> • BIOS resident in a Serial Peripheral Interface (SPI) Flash device • Support for Advanced Configuration and Power Interface (ACPI), and System Management BIOS (SMBIOS) |
| Hardware Management | Nuvoton NCT6793D based subsystem, including: <ul style="list-style-type: none"> • Voltage sense to detect out of range power supply voltages • Thermal sense to detect out of range thermal values |
| Environment | <ul style="list-style-type: none"> • Operating Temperature: 0°C to +60°C • Storage Temperature: -20°C to +70°C |
| Safety | <ul style="list-style-type: none"> • CE • FCC |

Desktop Board Components

Figure shows the approximate location of the major components on the top side of MiTAC Desktop Board PD10AI.

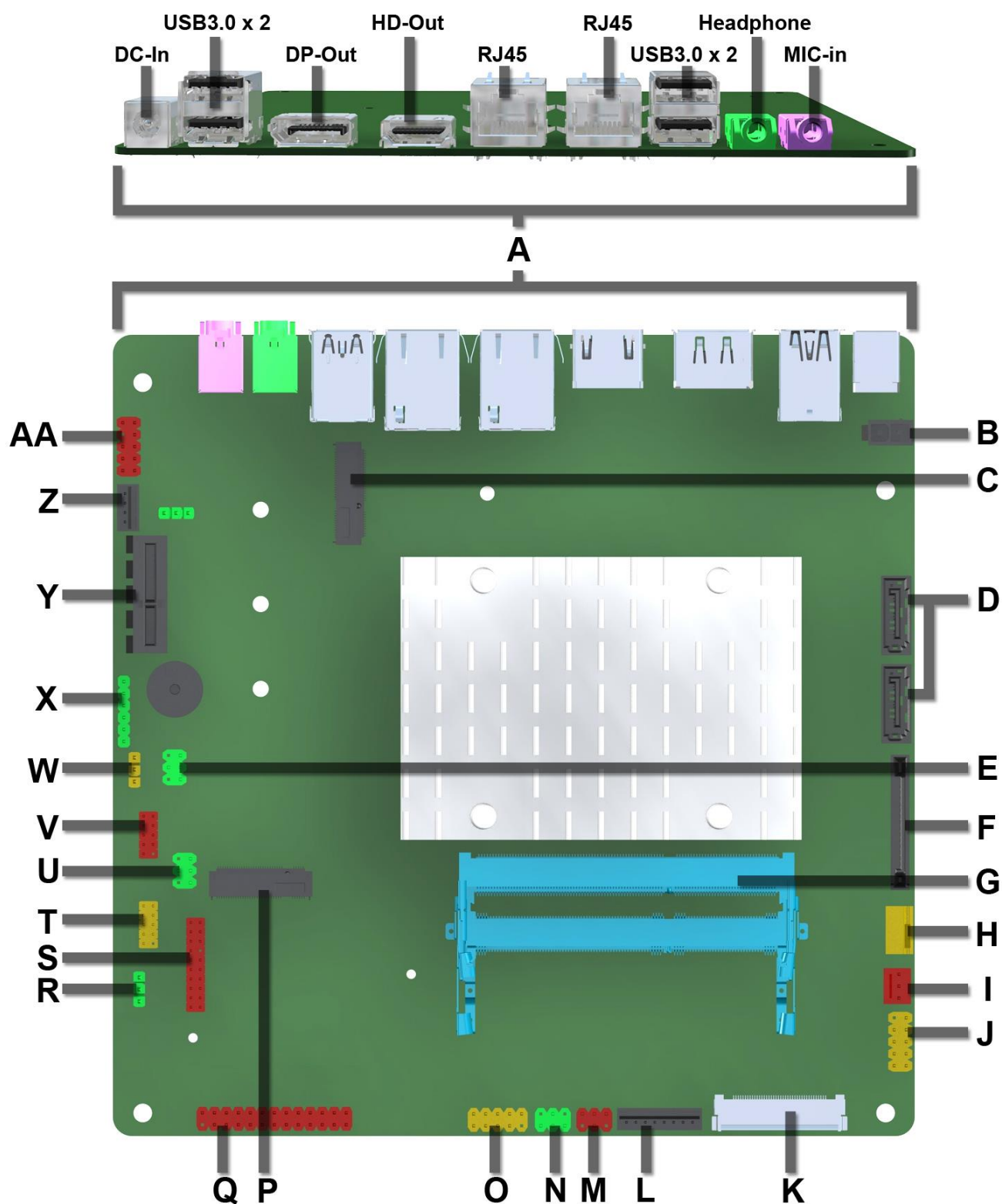


Figure: MiTAC Desktop Board PD10AI Components (Top)

TABLE: MITAC DESKTOP BOARD PD10AI COMPONENTS

| | |
|----|---|
| A | Back Panel Connectors |
| B | 12V 2-PIN DC-in |
| C | M.2 Key-E |
| D | SATA 7-Pin Connector |
| E | Com2 RS232 Power Select |
| F | SATA Power Connector |
| G | SO-DIMM slot |
| H | CPU Fan Header |
| I | System Fan Header |
| J | Chassis Front I/O Header |
| K | LVDS Connector (eDP Connector at the bottom side) |
| L | Panel Power |
| M | LCD Panel Power Select |
| N | Inverter Power Select |
| O | USB 2.0 Header |
| P | M.2 Key-B |
| Q | Parallel port/ MiAPI Header |
| R | CMOS Reset |
| S | Legacy I/O Header |
| T | COM1 RS232 |
| U | COM1 RS232 Power Select |
| V | COM2 RS232 |
| W | AT/ATX Mode |
| X | MCU Program Header |
| Y | PCI Express X1 Connector |
| Z | Speaker Header |
| AA | Front Panel Audio Header |

Processor

MITAC Desktop Board PD10AI includes a passively-cooled, Intel Apollo Lake N3350/N4200 processor with integrated graphics and memory controller. The processor is soldered to the Desktop Board and is not customer upgradeable.

NOTE

The board is designed to be passively cooled in a properly ventilated chassis. Chassis venting locations are recommended above the processor heatsink area for maximum heat dissipation effectiveness.



System Memory

NOTE

To be fully compliant with all applicable SDRAM memory specifications, the board should be populated with DIMMs that support the Serial Presence Detect (SPD) data structure. If your memory modules do not support SPD, you will see a notification to this effect on the screen at power up. The BIOS will attempt to configure the memory controller for normal operation.



The Desktop Board has two 204-pin DDR3L SO-DIMM sockets with gold-plated contacts. These sockets support:

- Support for DDR3L SO-DIMMs
- Serial Presence Detect (SPD) memory only
- Non-ECC memory
- Up to 8 GB of memory (on a single SO-DIMM or 4 GB each by 2 SO-DIMM)

Connecting to the Internal Headers and Connectors

LVDS feature:

40-pin LVDS connector must be right-angled, single-row shrouded colored white, as shown in Figure 1 (part number reference: ACES 88341-40xx).

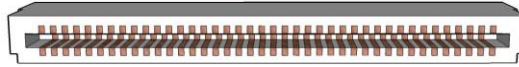


Figure 1: Panel 40-pin LVDS connector

| Pin | Signal | Pin | Signal |
|-----|--------------|-----|--------------|
| 1 | ODD_Lane3_P | 21 | N/C |
| 2 | ODD_Lane3_N | 22 | EDID_3.3V |
| 3 | ODD_Lane2_P | 23 | LCD_GND |
| 4 | ODD_Lane2_N | 24 | LCD_GND |
| 5 | ODD_Lane1_P | 25 | LCD_GND |
| 6 | ODD_Lane1_N | 26 | ODD_CLK_P |
| 7 | ODD_Lane0_P | 27 | ODD_CLK_N |
| 8 | ODD_Lane0_N | 28 | BKLT_GND |
| 9 | EVEN_Lane3_P | 29 | BKLT_GND |
| 10 | EVEN_Lane3_N | 30 | BKLT_GND |
| 11 | EVEN_Lane2_P | 31 | EDID_CLK |
| 12 | EVEN_Lane2_N | 32 | BKLT_ENABLE |
| 13 | EVEN_Lane1_P | 33 | BKLT_PWM_DIM |
| 14 | EVEN_Lane1_N | 34 | EVEN_CLK_P |
| 15 | EVEN_Lane0_P | 35 | EVEN_CLK_N |
| 16 | EVEN_Lane0_N | 36 | BKLT_PWR |
| 17 | EDID_GND | 37 | BKLT_PWR |
| 18 | LCD_VCC | 38 | BKLT_PWR |
| 19 | LCD_VCC | 39 | N/C |
| 20 | LCD_VCC | 40 | EDID_DATA |

Table 1: 40-pin LVDS connector pin-out

eDP feature:

40-pin eDP connector must be right-angled, single-row shrouded colored black, as shown in Figure 2 (part number reference: ACES 50203-04001-001).



Figure 2: Panel 40-pin LVDS connector

| Pin | Signal | Pin | Signal |
|-----|----------------------|-----|---------------------|
| 1 | NC_Reserved | 21 | LCD_VCC |
| 2 | High-speed_GND | 22 | LCD_Self_Test-or-NC |
| 3 | Lane3_N (DDPD_ [3]N) | 23 | LCD_GND |
| 4 | Lane3_P (DDPD_ [3]P) | 24 | LCD_GND |
| 5 | High-speed_GND | 25 | LCD_GND |
| 6 | Lane2_N (DDPD_ [2]N) | 26 | LCD_GND |
| 7 | Lane2_P (DDPD_ [2]P) | 27 | HPD (DDPD_HPD) |
| 8 | High-speed_GND | 28 | BKLT_GND |
| 9 | Lane1_N (DDPD_ [1]N) | 29 | BKLT_GND |
| 10 | Lane1_P (DDPD_ [1]P) | 30 | BKLT_GND |
| 11 | High-speed_GND | 31 | BKLT_GND |
| 12 | Lane0_N (DDPD_ [0]N) | 32 | BKLT_ENABLE |
| 13 | Lane0_P (DDPD_ [0]P) | 33 | BKLT_PWM_DIM |
| 14 | High-speed_GND | 34 | NC_Reserved |
| 15 | AUX_CH_P (DDPD_AUXP) | 35 | NC_Reserved |
| 16 | AUX_CH_N (DDPD_AUXN) | 36 | BKLT_PWR |
| 17 | High-speed_GND | 37 | BKLT_PWR |
| 18 | LCD_VCC | 38 | BKLT_PWR |
| 19 | LCD_VCC | 39 | BKLT_PWR |
| 20 | LCD_VCC | 40 | NC_Reserved |

Table 2: 40-pin eDP connector pin-out

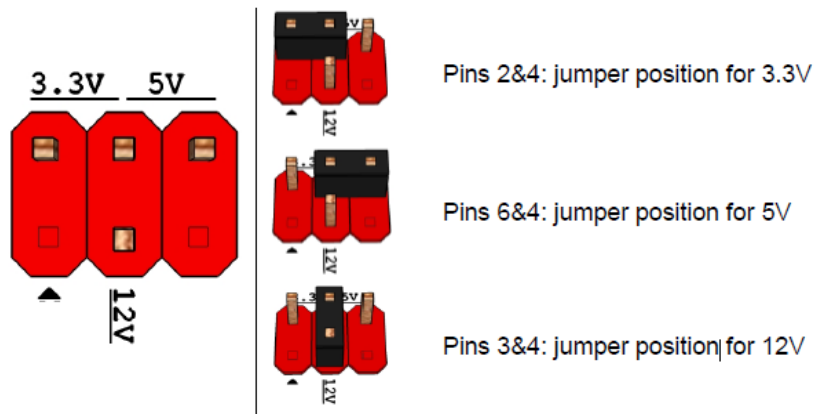


Figure 3: Panel LCD voltage selection header (Location M)

| Pin | Signal Name | Description |
|-----|-------------|---------------------------|
| 1 | Key | No pin |
| 2 | 3.3V | 3.3V option |
| 3 | 12V | 12V option |
| 4 | LCD_VCC | Send voltage to connector |
| 5 | Key | No pin |
| 6 | 5V | 5V option (default) |

Table 3: Panel LCD voltage selection header pin-out (Location M)

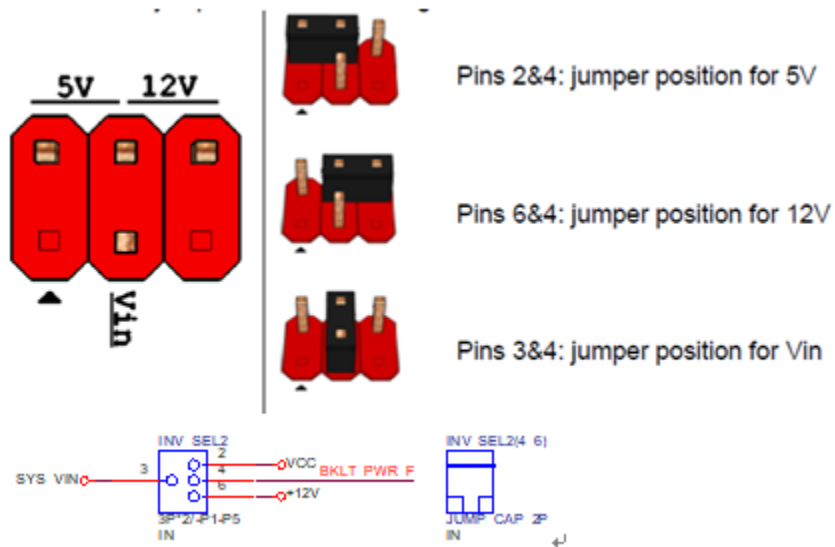


Figure 4: Backlight inverter voltage selection header (Location N)

| Pin | Signal | Description |
|-----|----------|-------------------------------------|
| 1 | Key | No pin |
| 2 | 5V | 5V option (default) |
| 3 | 8v~24V | Vin option same as DC-IN power rail |
| 4 | BKLT_PWR | Send voltage to connector |
| 5 | Key | No pin |
| 6 | 12V | 12V option |

Table 4: Backlight inverter voltage selection header pin-out(Location N)

LVDS inverter power header pin-out (part number reference: Foxconn HF5508).

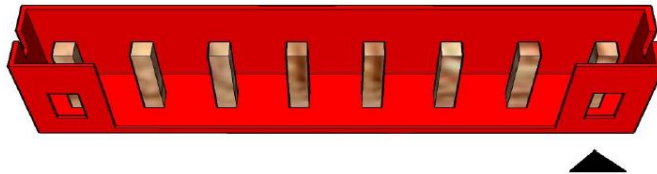


Figure 5: LVDS inverter power header pin-out

| Pin | Signal | Description |
|-----|----------|--------------------------|
| 1 | BKLT_EN | Backlight enable |
| 2 | BKLT_PWM | Backlight control |
| 3 | BKLT_PWR | Backlight inverter power |
| 4 | BKLT_PWR | Backlight inverter power |

| | | |
|---|-------------------------|---------------------------|
| 5 | BKLT_GND/Brightness_GND | Ground (shared) |
| 6 | BKLT_GND/Brightness_GND | Ground (shared) |
| 7 | Brightness_Up | Panel brightness increase |
| 8 | Brightness_Down | Panel brightness decrease |

Table 5: 8-pin FPD power connector pin-out

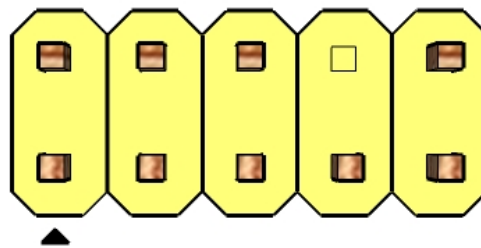


Figure 6: Front panel audio header

| Pin | Signal name | Description |
|-----|-------------|--|
| 1 | MIC | Front panel microphone input signal (biased when supporting stereo microphone) |
| 2 | AUD_GND | Ground used by analog audio circuits |
| 3 | MIC_BIAS | Microphone power / additional MIC input for stereo microphone support |
| 4 | PRESENCE# | Active low signal that signals BIOS that an Intel® HD Audio dongle is connected to the analog header. PRESENCE# = 0 when an Intel® HD Audio dongle is connected. |
| 5 | FP_OUT_R | Right channel audio signal to front panel (headphone drive capable) |
| 6 | AUD_GND | Ground used by analog audio circuits |
| 7 | RESERVED | Reserved |
| 8 | KEY | No pin |
| 9 | FP_OUT_L | Left channel audio signal to front panel (headphone drive capable) |
| 10 | AUD_GND | Ground used by analog audio circuits |

Table 6: Passive AC'97 front panel audio header pinout

| Pin | Signal name | Description |
|-----|---------------|--|
| 1 | PORT 1L | Analog Port 1 - Left channel (Microphone) |
| 2 | GND | Ground |
| 3 | PORT 1R | Analog Port 1 - Right channel (Microphone) |
| 4 | PRESENCE# | Active low signal that signals BIOS that an Intel® HD Audio dongle is connected to the analog header. PRESENCE# = 0 when an Intel® HD Audio dongle is connected. |
| 5 | PORT 2R | Analog Port 2 - Right channel (Headphone) |
| 6 | SENSE1 RETURN | Jack detection return for front panel (JACK1) |
| 7 | SENSE SEND | Jack detection sense line from the Intel® HD Audio CODEC jack detection resistor network |
| 8 | KEY | No pin |
| 9 | PORT 2L | Analog Port 2 - Left channel (Headphone) |
| 10 | SENSE2 RETURN | Jack detection return for front panel (JACK2) |

Table 6.1: HD Audio front panel audio header pinout

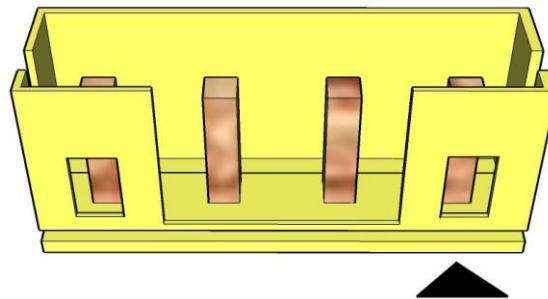


Figure 7: Internal stereo speakers header diagram

| Pin | Signal name | Description |
|-----|-------------|---|
| 1 | Front_L- | Analog front left (differential negative) |
| 2 | Front_L+ | Analog front left (differential positive) |

| | | |
|---|----------|--|
| 3 | Front_R+ | Analog front right (differential positive) |
| 4 | Front_R- | Analog front right (differential negative) |

Table 7: Internal stereo speakers header pinout

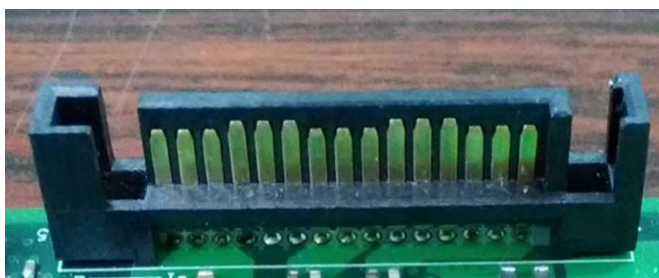


Figure 8: SATA Power Cable pin-out

| Pin | Signal Name | Description |
|-----|-------------|-------------|
| 1 | VCC3 | Power |
| 2 | VCC3 | Power |
| 3 | VCC3 | Power |
| 4 | GND | Ground |
| 5 | GND | Ground |
| 6 | GND | Ground |
| 7 | VCC | Power |
| 8 | VCC | Power |
| 9 | VCC | Power |
| 10 | GND | Ground |
| 11 | RES | NC |
| 12 | GND | Ground |
| 13 | +12V | Power |

| | | |
|----|------|-------|
| 14 | +12V | Power |
| 15 | +12V | Power |

Table 8:SATA Power Cable signals



Figure 9:SATA Header pin-out

| Pin | Signal Name | Description |
|-----|----------------|------------------------------|
| 1 | GND | Ground |
| 2 | SATAHDR_TXP0_C | SATA DATA Transmit(positive) |
| 3 | SATAHDR_TXN0_C | SATA DATA Transmit(negative) |
| 4 | GND | Ground |
| 5 | SATAHDR_RXN0_C | SATA DATA Receive(negative) |
| 6 | SATAHDR_RXP0_C | SATA DATA Receive(positive) |
| 7 | GND | Ground |
| 8 | G1 | NC |
| 9 | G2 | NC |

Table 9:SATA Header signals

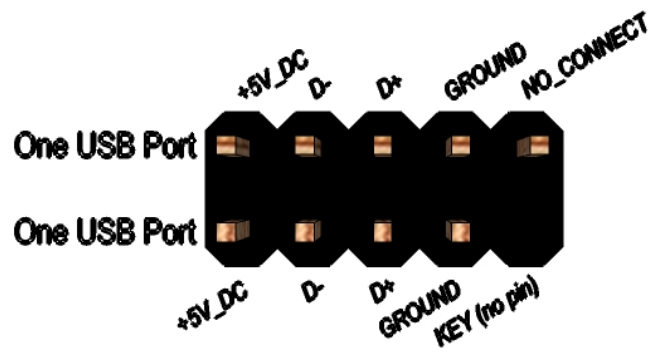


Figure 10: Front panel USB header pin-out

| Pin | Signal | Pin | Signal |
|-----|-----------------|-----|-----------------|
| 1 | +5V DC | 2 | +5V DC |
| 3 | Data (negative) | 4 | Data (negative) |
| 5 | Data (positive) | 6 | Data (positive) |
| 7 | Ground | 8 | Ground |
| 9 | Key (no pin) | 10 | No Connect |

Table 10: Front panel USB header signals

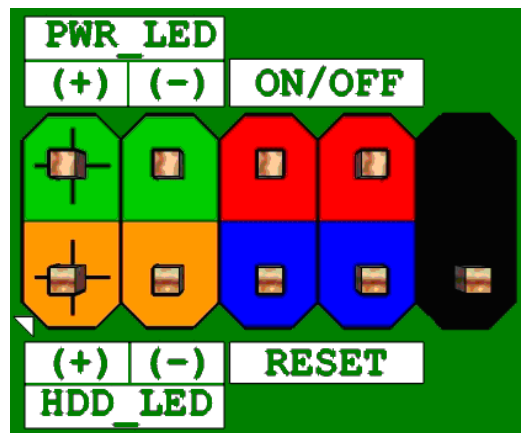


Figure 11: Front panel main header pin-out

| Pin | Signal Name | Description | Pin | Signal Name | Description |
|-----|---------------|--------------------------------|-----|----------------|------------------------------------|
| 1 | HDD_POWER_LED | Pull-up resistor (750Ω) to +5V | 2 | POWER_LED_MAIN | [Out] Front panel LED (main color) |
| 3 | HDD_LED# | [Out] Hard disk activity LED | 4 | POWER_LED_ALT | [Out] Front panel LED (alt color) |

| | | | | | |
|---|---------------|-------------------|----|---------------|-------------------|
| 5 | GROUND | Ground | 6 | POWER_SWITCH# | [In] Power switch |
| 7 | RESET_SWITCH# | [In] Reset switch | 8 | GROUND | Ground |
| 9 | +5V_DC | Power | 10 | KEY | No pin |

Table 11: Front panel main header signals

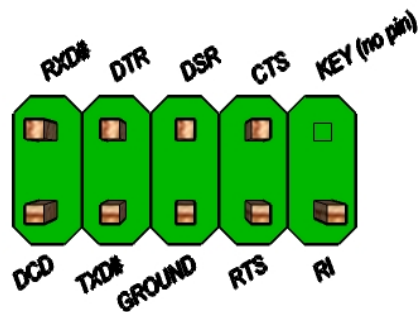
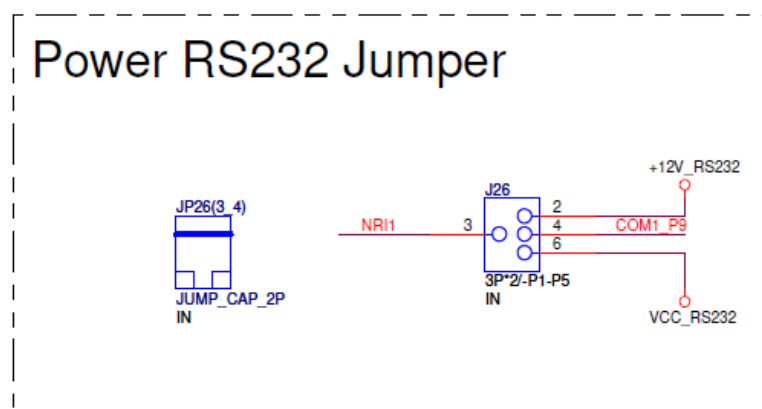


Figure 12: serial port pin out

| Pin | | Signal | Pin | | Signal |
|-----|----------------|---------------------------|-----|-------|---------------------------|
| 1 | COM3_P1_40mils | DCD (Data Carrier Detect) | 2 | NRX3 | RXD# (Receive Data) |
| 3 | NTX3 | TXD# (Transmit Data) | 4 | NDTR3 | DTR (Data Terminal Ready) |
| 5 | GND | Ground | 6 | NDSR3 | DSR (Data Set Ready) |
| 7 | NRTS3 | RTS (Request To Send) | 8 | NCTS3 | CTS (Clear To Send) |
| 9 | COM3_P9_40mils | RI (Ring Indicator) | 10 | Key | Key (no pin) |

Table 12: Power RS232 Serial port header signals

Note: The serial port header must be placed within a keep-out-zone no smaller than 1 inch (half-inch to the left and half-inch to the right of the header) so as to support commonly available dongles.



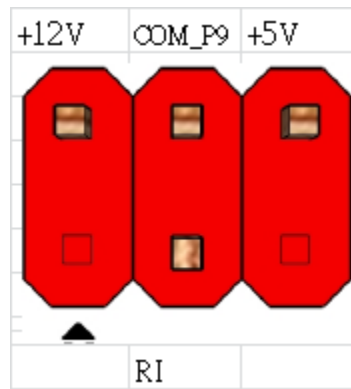


Figure 13: power RS232 header pin-out

| J26 pin out | | | |
|-------------|-------|----|---------|
| | | P2 | V_12P |
| P3 | NDCD1 | P4 | COM1_P9 |
| | | P6 | V+5P |

| J27 pin out | | | |
|-------------|------|----|---------|
| | | P2 | V_12P |
| P3 | NRI2 | P4 | COM2_P9 |
| | | P6 | V+5P |

Table 13: power RS232 Serial port header signals

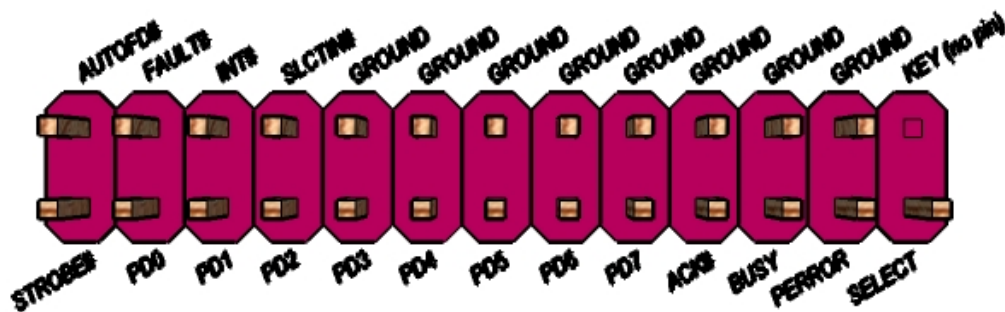


Figure 14: Parallel port header pin-out

| Pin | Standard Signal Name | ECP Signal Name | EPP Signal Name |
|-----|----------------------|----------------------|-----------------|
| 1 | STROBE# | STROBE# | WRITE# |
| 2 | AUTOFD# | AUTOFD#, HOSACK | DATASTB# |
| 3 | PD0 | PD0 | PD0 |
| 4 | FAULT# | FAULT#, PERIPHREQST# | FAULT# |
| 5 | PD1 | PD1 | PD1 |
| 6 | INT# | INT#, REVERSERQST# | RESET# |
| 7 | PD2 | PD2 | PD2 |
| 8 | SLCTIN# | SLCTIN# | ADDRSTB# |
| 9 | PD3 | PD3 | PD3 |
| 10 | GROUND | GROUND | GROUND |
| 11 | PD4 | PD4 | PD4 |
| 12 | GROUND | GROUND | GROUND |
| 13 | PD5 | PD5 | PD5 |
| 14 | GROUND | GROUND | GROUND |
| 15 | PD6 | PD6 | PD6 |
| 16 | GROUND | GROUND | GROUND |
| 17 | PD7 | PD7 | PD7 |
| 18 | GROUND | GROUND | GROUND |
| 19 | ACK# | ACK# | INTR |

| Pin | Standard Signal Name | ECP Signal Name | EPP Signal Name |
|-----|----------------------|------------------|-----------------|
| 20 | GROUND | GROUND | GROUND |
| 21 | BUSY | BUSY#, PERIPHACK | WAIT# |
| 22 | GROUND | GROUND | GROUND |
| 23 | PERROR | PE, ACKREVERSE# | PE |
| 24 | GROUND | GROUND | GROUND |
| 25 | SELECT | SELECT | SELECT |
| 26 | KEY (no pin) | KEY (no pin) | KEY (no pin) |

Table 24: Parallel port header signals

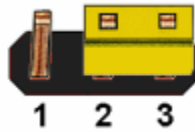


Figure 15: Clear CMOS

| CMOS | Jumper Header location |
|------------|------------------------|
| Default | Pin1 and Pin2 |
| Clear CMOS | Pin2 and Pin3 |

Table 35: Clear CMOS signals



Figure 16: AT/ATX mode header pin-out

| AT/ATX | Jumper Header location |
|-------------|------------------------|
| Default | Pin2 and Pin3 |
| Auto PWR ON | Pin1 and Pin2 |

Table 46: AT/ATX mode header pin-out

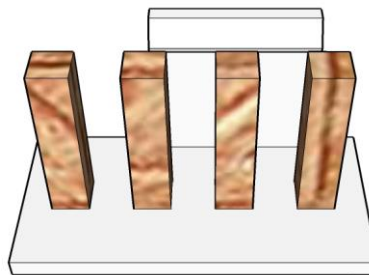


Figure 17: CPU fan header

| Pin | Signal |
|-----|--------------|
| 1 | Ground |
| 2 | +12V |
| 3 | CPU_FAN_TACH |
| 4 | CPU_FAN_CTRL |

Table 57: Figure 27: CPU fan header

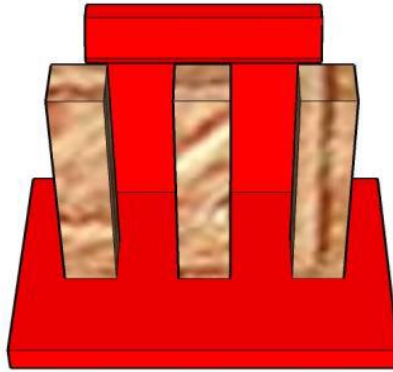


Figure 18: system fan header

| Pin | Signal |
|-----|----------|
| 1 | Ground |
| 2 | +12V |
| 3 | SYSFANIN |

Table 68: System fan header

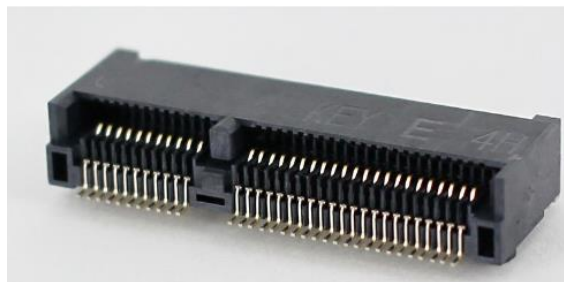


Figure 19: M.2 E key slot For wireless pin-out

| | Standard M.2 Key E | LcP Signals | LcP Signals | Standard M.2 Key E | |
|----|--|-----------------------------|-----------------------|------------------------|----|
| | | | GND | | 75 |
| 74 | +V3P3A | | WT_CLKP | REFCLKN1 | 73 |
| 72 | +V3P3A | | WT_CLKN | REFCLKP1 | 71 |
| 70 | PEWake1# (IO)(0/3.3V) | | | | 69 |
| 68 | CLKREQ1# (IO)(0/3.3V) | | GND | | 67 |
| 66 | PERST1# (O)(0/3.3V) | | WT_D0P | PERn1 | 65 |
| 64 | RESERVED | REFCLK0 (I)(1V @38.4MHz) | WT_D0N | PERp1 | 63 |
| 62 | ALERT# (I)(0/1.8) | A4WP_IRQ# | GND | | 61 |
| 60 | I2C_CLK (O)(0/1.8V) | A4WP_I2C_CLK | WT_D1P | PETn1 | 59 |
| 58 | I2C_DATA (IO)(0/1.8) | A4WP_I2C_DATA | WT_D1N | PETp1 | 57 |
| 56 | W_DISABLE1# (O)(0/3.3V) | | GND | | 55 |
| 54 | W_DISABLE2# (O)(0/3.3V) | | PEWake0# (IO)(0/3.3V) | | 53 |
| 52 | PERST0# (O)(0/3.3V) | | CLKREQ0# (IO)(0/3.3V) | | 51 |
| 50 | SUSCLK(32kHz) (O)(0/3.3V) | C_P32K (3.3V Tolerant) | GND | | 49 |
| 48 | COEX_TXD (O)(0/1.8V) | | REFCLKN0 | | 47 |
| 46 | COEX_RXD (O)(0/1.8V) | | REFCLKP0 | | 45 |
| 44 | COEX3 (IO)(0/1.8V) | | GND | | 43 |
| 42 | CLink CLK | | PERn0 | | 41 |
| 40 | CLink DATA | | PERp0 | | 39 |
| 38 | CLink RESET (O)(0/3.3V) | | GND | | 37 |
| 36 | LPSS UART RTS (O)(0/1.8V) / BRI_DT (MUX'd in PCH/SoC) | | PETn0 | | 35 |
| 34 | LPSS UART CTS (I)(0/1.8V) / RGI_RSP (MUX'd in PCH/SoC) | | PETp0 | | 33 |
| 32 | LPSS UART Tx (O)(0/1.8V) / RGI_DT (MUX'd in PCH/SoC) | | GND | | |
| E | Connector Key | | Connector Key | | E |
| | Connector Key | | Connector Key | | |
| | Connector Key | | Connector Key | | |
| | Connector Key | | Connector Key | | |
| 22 | LPSS UART Rx (I)(0/1.8V) / BRI_RSP (MUX'd in PCH/SoC) | | WGR_CLKP | SDIO Reset#(O)(0/1.8V) | 23 |
| 20 | UART Wake# (I)(0/3.3V) | | WGR_CLKN | SDIO Wake#(I)(0/1.8V) | 21 |
| 18 | GND | GND/LNA_EN (LcP Production) | GND | SDIO DAT3(IO)(0/1.8V) | 19 |
| 16 | LED2# (I)(OD) | | WGR_D0P | SDIO DAT2(IO)(0/1.8V) | 17 |
| 14 | PCM_OUT (O)(0/1.8V) / CLKREQ0 (MUX'd in PCH/SoC) | | WGR_D0N | SDIO DAT1(IO)(0/1.8V) | 15 |
| 12 | PCM_IN (I)(0/1.8V) | | GND | SDIO DAT0(IO)(0/1.8V) | 13 |
| 10 | PCM_SYNC (OI)(0/1.8V) / RF_RESET_B (MUX'd in PCH/SoC) | | WGR_D1P | SDIO CMD(IO)(0/1.8V) | 11 |
| 8 | PCM_CLK (OI)(0/1.8V) | | WGR_D1N | SDIO CLK(O)(0/1.8V) | 9 |
| 6 | LED1# (I)(OD) | | GND | | 7 |
| 4 | +V3P3A | | USB_D- | | 5 |
| 2 | +V3P3A | | USB_D+ | | 3 |
| | | | GND | | 1 |

Table 19: M.2 E key slot For wireless signals

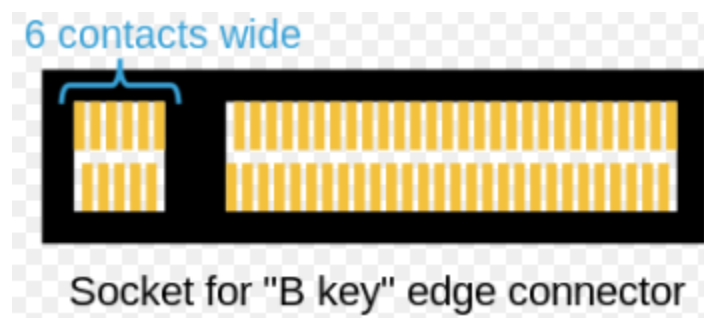


Figure 20: M.2 B key slot for storage pin-out

| Pin | Signal Name | Pin | Signal Name |
|-----|-------------|-----|-------------|
| 1 | CONFIG_3 | 2 | +Vcc(3.3v) |

| | | | |
|----|------------|----|------------|
| 3 | GND | 4 | +Vcc(3.3v) |
| 5 | GND | 6 | POWER_OFF# |
| 7 | USB D0+ | 8 | W disable |
| 9 | USB D0- | 10 | GPIO |
| 11 | GND | 12 | Module Key |
| 13 | Module Key | 14 | Module Key |
| 15 | Module Key | 16 | Module Key |
| 17 | Module Key | 18 | Module Key |
| 19 | Module Key | 20 | X |
| 21 | GND | 22 | X |
| 23 | X | 24 | X |
| 25 | X | 26 | X |
| 27 | GND | 28 | X |
| 29 | X | 30 | X |
| 31 | X | 32 | X |
| 33 | GND | 34 | X |
| 35 | X | 36 | X |

| | | | |
|----|--------------------------|----|----------------|
| 37 | X | 38 | DEVSLP |
| 39 | GND | 40 | X |
| 41 | SATA B+ | 42 | X |
| 43 | SATA B- | 44 | X |
| 45 | GND | 46 | X |
| 47 | SATA A- | 48 | X |
| 49 | SATA A+ | 50 | Platform Reset |
| 51 | GND | 52 | Clock request |
| 53 | REFCLKN | 54 | PCIE_WAKE |
| 55 | REFCLKP | 56 | X |
| 57 | GND | 58 | X |
| 59 | X | 60 | X |
| 61 | X | 62 | X |
| 63 | X | 64 | X |
| 65 | X | 66 | X |
| 67 | Wireless Module Reset | 68 | SUSCLK |
| 69 | CONFIG_1 | 70 | +Vcc(3.3v) |

| | | | |
|----|-----|----|------------|
| 71 | GND | 72 | +Vcc(3.3v) |
| 73 | GND | 74 | +Vcc(3.3v) |
| 75 | GND | | |

Table 20: M.2 B key slot For storage signals

The MiAPI port header must be 2x13, 2.54mm pitch, colored pink and keyed at pin 26, as defined in Table 24:

Parallel port header signals13.

| Pin | Signal Name | Pin | Signal Name |
|-----|-------------|-----|----------------|
| 1 | NC | 2 | VCC |
| 3 | MAPI_GPIO1 | 4 | Power Button |
| 5 | MAPI_GPIO2 | 6 | UART_TX |
| 7 | MAPI_GPIO3 | 8 | UART_RX |
| 9 | MAPI_GPIO4 | 10 | 5VSB |
| 11 | MAPI_GPIO5 | 12 | Watchdog Timer |
| 13 | MAPI_GPIO6 | 14 | GND |
| 15 | MAPI_GPIO7 | 16 | GND |
| 17 | MAPI_GPIO8 | 18 | GND |
| 19 | MAPI_GPIO9 | 20 | GND |

| | | | |
|----|---------------|----|--------------|
| 21 | MAPI_GPIO10 | 22 | GND |
| 23 | SMB_MAIN_DATA | 24 | GND |
| 25 | SMB_MAIN_CLK | 26 | KEY (no pin) |

Table 21: MiAPI header signals

MITAC Desktop Board PD10AI BIOS Specifiction

1. Main Page

| Main | Advanced | Chipset | Security | Boot | Save & Exit |
|---|----------|---------|----------|------|--|
| BIOS Information BIOS Vender American Megatrends Core Version 5.12 Compliancy UEFI 2.5; PI 1.4 BIOS Version D7670X03 Build Date 11/07/2016 Processor Information Genuine Intel® CPU @ 1.50GHz | | | | | Item help |
| SATA Devices SATA Port0 [Not install] SATA Port1 [Not install] | | | | | →←: Select Screen ↑↓: Select Item Enter: Select +/- : Change Opt F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit |
| Memory Information Total Memory 8192 MB Memory speed 1600MHz System Language [English] | | | | | |

| | | |
|---|-------------------|--|
| System Date | [Mon, mm/dd/yyyy] | |
| System Time | [hh:mm:ss] | |
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| | |
|---------------|---|
| Field Name | BIOS Vender |
| Default Value | AMI Megatrends |
| Comment | This field is not selectable. There is no help text associated with it. |

| | |
|---------------|---|
| Field Name | Core Version |
| Default Value | 5.12 |
| Comment | This field is not selectable. There is no help text associated with it. |

| | |
|---------------|---|
| Field Name | Complacency |
| Default Value | UEFI 2.5; PI 1.4 |
| 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 |
|------------|-------------------|

| | |
|---------------|---|
| Default Value | Display build 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 | SATA port 0 |
| Value | Display the SATA device information [Not install] |
| Comment | This field is not selectable. There is no help text associated with it. |

| | |
|------------|---|
| Field Name | SATA port 1 |
| Value | Display the SATA device information [Not install] |
| Comment | This field is not selectable. There is no help text associated with it. |

| | |
|------------|---|
| Field Name | Total Memory |
| Value | Display the installed memory size. |
| Comment | This field is not selectable. There is no help text associated with it. |

| | |
|---------------|------------------------------------|
| Field Name | Memory Speed |
| Default Value | Display the installed memory speed |

| | |
|---------|---|
| Comment | This field is not selectable. There is no help text associated with it. |
|---------|---|

| | |
|----------------|------------------------------------|
| Field Name | System Language |
| Default Value | [English] |
| Possible Value | [English] |
| Help | Choose the system default language |

| | |
|----------------|---|
| 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. Default Ranges: Year: 2005-2099 Months: 1-12 Days: dependent on month |

| | |
|----------------|--|
| 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. |

2. Advanced Page

| Main | Advanced | Chipset | Security | Boot | Save & Exit |
|---|----------|---------|----------|------|---|
| LAN1 [Enable] | | | | | Item help |
| LAN2 [Enable] | | | | | |
| Wireless LAN RF [Enable] | | | | | |
| Intel(R) I211 Gigabit Network Connection -xx:xx:xx:xx:... | | | | | |
| Intel(R) I211 Gigabit Network Connection -xx:xx:xx:xx:... | | | | | →←: Select Screen ↑↓: Select Item Enter: Select +/- : Change Opt F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit |
| Driver Health | | | | | |
| ▶ACPI Settings | | | | | |
| ▶SMART settings | | | | | |
| ▶NCT6104DSEC Super IO Configuration | | | | | |
| ▶NCT6793D Super IO Configuration | | | | | |
| ▶S5 RTC Wake Settings | | | | | |
| ▶CPU Configuration | | | | | |
| ▶Network Stack Configuration | | | | | |
| ▶Platform Trust Technology | | | | | |
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| | |
|----------------|---------------------|
| Field Name | LAN1 |
| Default Value | Enabled |
| Possible Value | Disabled Enabled |
| Help | Enable/Disable LAN1 |

| | |
|----------------|---------------------|
| Field Name | LAN2 |
| Default Value | Enabled |
| Possible Value | Disabled Enabled |
| Help | Enable/Disable LAN2 |

| | |
|----------------|----------------------------------|
| Field Name | Wireless LAN RF |
| Default Value | Enabled |
| Possible Value | Disabled Enabled |
| Help | Enable/Disable Wireless Lan RF |

| | |
|------------|--|
| Field Name | Intel(R) I211 Gigabit Network Connection -xx:xx:xx:xx:... |
| Help | Configure Gigabit Ethernet device parameters |

| | |
|------------|--|
| Field Name | Intel(R) I211 Gigabit Network Connection -xx:xx:xx:xx:... |
| Help | Configure Gigabit Ethernet device parameters |

| | |
|------------|--|
| Field Name | Driver Health |
| Help | Provides Health Status for the Drivers/Controllers |

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

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

| | |
|------------|---|
| Field Name | NCT6104DSEC Super IO Configuration |
| Help | System Super IO Chip Parameters. |
| Comment | Press Enter when selected to go into the associated Sub-Menu. |

| | |
|------------|---|
| Field Name | NCT6793D Super IO Configuration |
| Help | System Super IO Chip Parameters. |
| 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 | CPU Configuration |
| Help | CPU Configuration Parameters. |
| Comment | Press Enter when selected to go into the associated Sub-Menu. |

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

| | |
|------------|---|
| Field Name | Platform Trust Technology |
| Help | Platform Trust Technology |
| Comment | Press Enter when selected to go into the associated Sub-Menu. |

2.2 Intel(R) I211 Gigabit Network Connection-xx:xx:xx:xx:...

| Main | Advanced | Chipset | Security | Boot | Save & Exit |
|---|----------|---------|----------|------|------------------------|
| NIC Configuration | | | | | Item help |
| Blink LEDS 0 | | | | | |
| UEFI Driver Intel(R) PRO/1000 7.0 | | | | | |
| Device Name Intel(R) I211 Gigabit..... | | | | | |
| Chip Type Intel i211 | | | | | →←: Select Screen |
| PCI Device ID 1539 | | | | | ↑↓: Select Item |
| PCI address 01:00:00 | | | | | Enter: Select |
| Link Status [Disconnected] | | | | | +/- : Change Opt |
| MAC Address 00:22:4D:B8:C3:48 | | | | | F1: General Help |
| | | | | | F2: Previous Values |
| | | | | | F3: Optimized Defaults |
| | | | | | F4: Save & Reset |
| | | | | | ESC: Exit |
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| | |
|------------|---|
| Field Name | NIC Configuration |
| Help | Click to configure the network device port. |
| Comment | Press Enter when selected to go into the associated Sub-Menu. |

| | |
|----------------|--|
| Field Name | Blink LEDS |
| Default Value | 0 |
| Possible Value | 0~15 |
| Help | Identify the physical network port by blinking the associated LED. |

| | |
|---------------|---|
| Field Name | UEFI Driver |
| Default Value | Intel(R) PRO/1000 7.0... |
| Comment | This field is not selectable. There is no help text associated with it. |

| | |
|---------------|---|
| Field Name | Device Name |
| Default Value | Intel (R) I211 Gigabit... |
| Comment | This field is not selectable. There is no help text associated with it. |

| | |
|---------------|---|
| Field Name | Chip Type |
| Default Value | Intel i211 |
| Comment | This field is not selectable. There is no help text associated with it. |

| | |
|---------------|---|
| Field Name | PCI Device ID |
| Default Value | 1539 |
| Comment | This field is not selectable. There is no help text associated with it. |

| | |
|---------------|---|
| Field Name | PCI Address |
| Default Value | 01:00:00 |
| Comment | This field is not selectable. There is no help text associated with it. |

| | |
|---------------|---|
| Field Name | Link Status |
| Default Value | [Disconnected] |
| Comment | This field is not selectable. There is no help text associated with it. |

| | |
|---------------|---|
| Field Name | MAC Address |
| Default Value | XX:XX:XX:XX:XX:XX |
| Comment | This field is not selectable. There is no help text associated with it. |

2.2.1 NIC configuration

| | | | | | |
|------|----------|---------|----------|------|-------------|
| Main | Advanced | Chipset | Security | Boot | Save & Exit |
|------|----------|---------|----------|------|-------------|

Link Speed

[Auto Negotiated]

Wake On Lan

[Enable]

Item

help

→←: 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 | Link Speed |
| Default Value | Auto Negotiated |
| Possible Value | Auto Negotiated 10 Mbps Half 10 Mbps Full |

| | |
|------|---|
| | 100 Mbps Half 100 Mbps Full |
| Help | Specifies the port speed used for the selected boot protocol. |

| | |
|----------------|--|
| Field Name | Wake On LAN |
| Default Value | Enable |
| Possible Value | Enable Disable |
| Help | Enables the server to be powered on using an in-band magic packet. |

2.3 Intel(R) I211 Gigabit Network Connection-xx:xx:xx:xx:...

| Main | Advanced | Chipset | Security | Boot | Save & Exit |
|---------------------------|----------|---------|---|------|-------------|
| ►NIC Configuration | | | Item help | | |
| Blink LEDS | | | 0 | | |
| UEFI Driver | | | Intel(R) PRO/1000 7.0 | | |
| Device Name | | | Intel(R) I211 Gigabit..... | | |
| Chip Type | | | Intel i211 | | |
| PCI Device ID | | | 1539 | | |
| PCI address | | | 01:00:00 | | |
| Link Status | | | [Disconnected] | | |
| | | | →←: Select Screen ↑↓: Select Item Enter: Select +/- : Change Opt F1: General Help | | |

| | |
|---|--|
| MAC Address 00:22:4D:B8:C3:48 | F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit |
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| | |
|------------|---|
| Field Name | NIC Configuration |
| Help | Click to configure the network device port. |
| Comment | Press Enter when selected to go into the associated Sub-Menu. |

| | |
|----------------|--|
| Field Name | Blink LEDS |
| Default Value | 0 |
| Possible Value | 0~15 |
| Help | Identify the physical network port by blinking the associated LED. |

| | |
|---------------|---|
| Field Name | UEFI Driver |
| Default Value | Intel(R) PRO/1000 7.0... |
| Comment | This field is not selectable. There is no help text associated with it. |

| | |
|---------------|---|
| Field Name | Device Name |
| Default Value | Intel (R) I211 Gigabit... |
| Comment | This field is not selectable. There is no help text associated with it. |

| | |
|---------------|------------------|
| Field Name | Chip Type |
| Default Value | Intel i211 |

| | |
|---------|---|
| Comment | This field is not selectable. There is no help text associated with it. |
|---------|---|

| | |
|---------------|---|
| Field Name | PCI Device ID |
| Default Value | 1539 |
| Comment | This field is not selectable. There is no help text associated with it. |

| | |
|---------------|---|
| Field Name | PCI Address |
| Default Value | 01:00:00 |
| Comment | This field is not selectable. There is no help text associated with it. |

| | |
|---------------|---|
| Field Name | Link Status |
| Default Value | [Disconnected] |
| Comment | This field is not selectable. There is no help text associated with it. |

| | |
|---------------|---|
| Field Name | MAC Address |
| Default Value | XX:XX:XX:XX:XX:XX |
| Comment | This field is not selectable. There is no help text associated with it. |

2.3.1 NIC configuration

| | | | | | |
|------|----------|---------|----------|------|-------------|
| Main | Advanced | Chipset | Security | Boot | Save & Exit |
|------|----------|---------|----------|------|-------------|

Link Speed

[Auto Negotiated]

Wake On Lan

[Enable]

Item

help

→←: 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 | Link Speed |
| Default Value | Auto Negotiated |
| Possible Value | Auto Negotiated 10 Mbps Half 10 Mbps Full |

| | |
|------|---|
| | 100 Mbps Half 100 Mbps Full |
| Help | Specifies the port speed used for the selected boot protocol. |

| | |
|----------------|--|
| Field Name | Wake On LAN |
| Default Value | Enable |
| Possible Value | Enable Disable |
| Help | Enables the server to be powered on using an in-band magic packet. |

2.4 Driver health

| Main | Advanced | Chipset | Security | Boot | Save & Exit |
|---|----------|---------|----------|------|---|
| <div> ▶ Intel(R) PRO/1000 7.3.20 PCI-E Healthy </div> <div> ▶ Intel(R) PRO/1000 7.3.06 PCI-E Healthy </div> <div> ▶ Intel(R) PRO/1000 7.3.06 PCI-E Healthy </div> | | | | | |
| | | | | | Item help |
| | | | | | →←: 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 | Intel(R) PRO/1000 7.3.20 PCI-E |
| Help | Provides Health Status for the Drivers/Controllers |
| Comment | Press Enter when selected to go into the associated Sub-Menu. |

| | |
|------------|---|
| Field Name | Intel(R) PRO/1000 7.3.06 PCI-E |
| Help | Provides Health Status for the Drivers/Controllers |
| Comment | Press Enter when selected to go into the associated Sub-Menu. |

| | |
|------------|---|
| Field Name | Intel(R) PRO/1000 7.3.06 PCI-E |
| Help | Provides Health Status for the Drivers/Controllers |
| Comment | Press Enter when selected to go into the associated Sub-Menu. |

MainAdvancedChipsetSecurityBootSave & Exit

Controller 73999398 Child 0Healthy

Intel(R) I211 Gigabit Network ConnectionHealthy

Itemhelp

→←: 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 | Controller xxxxxxxx Child 0 |
| Help | Provides Health Status for the Drivers/Controllers |
| Comment | This field is not selectable. There is no help text associated with it. |

| | |
|------------|---|
| Field Name | Intel(R) I211 Gigabit Network Connection |
| Help | Provides Health Status for the Drivers/Controllers |
| Comment | This field is not selectable. There is no help text associated with it. |

2.4.2 Intel(R) PRO/1000 7.3.06 PCI-E

| Main | Advanced | Chipset | Security | Boot | Save & Exit |
|---|----------|---------|----------|------|---|
| Controller 73999398 Child 0 | | | | | Healthy |
| Intel(R) I211 Gigabit Network Connection | | | | | Healthy |
| | | | | | Item help |
| | | | | | →←: Select Screen ↑↓: Select Item Enter: Select +/- : Change Opt F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit |
| Version 2.18.1263. Copyright (C) 2017 American Megatrends, Inc. | | | | | |

| | |
|------------|---|
| Field Name | Controller xxxxxxxx Child 0 |
| Help | Provides Health Status for the Drivers/Controllers |
| Comment | This field is not selectable. There is no help text associated with it. |

| | |
|------------|---|
| Field Name | Intel(R) I211 Gigabit Network Connection |
| Help | Provides Health Status for the Drivers/Controllers |
| Comment | This field is not selectable. There is no help text associated with it. |

2.5 ACPI Settings

| Main | Advanced | Chipset | Security | Boot | Save & Exit |
|--|----------|---------|----------|------|---|
| ACPI Settings | | | | | <div>Item help</div> |
| <div>Enable ACPI Auto Configuration [Disabled]</div> | | | | | |
| <div>Enable Hibernation [Enabled]</div> | | | | | |
| <div>ACPI Sleep State [S3 (Suspend to RAM)]</div> | | | | | |
| | | | | | <div>→←: Select Screen</div> <div>↑↓: Select Item</div> <div>Enter: Select</div> <div>+/- : Change Opt</div> <div>F1: General Help</div> <div>F2: Previous Values</div> <div>F3: Optimized Defaults</div> |

| | |
|---|---|
| | F4: Save & Reset ESC: Exit |
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| | |
|----------------|---|
| Field Name | Enable ACPI Auto Configuration |
| Default Value | [Disabled] |
| Possible Value | Enabled Disabled |
| Help | Enables or Disables BIOS ACPI Auto Configuration. |

| | |
|----------------|--|
| Field Name | Enable Hibernation |
| Default Value | [Enabled] |
| Possible Value | Enabled Disabled |
| Help | Enables or Disables System ability to Hibernate (OS/S4 Sleep State). This option may be not effective with some OS. |

| | |
|----------------|---|
| Field Name | ACPI Sleep State |
| Default Value | [S3 (Suspend to RAM)] |
| Possible Value | Suspend Disabled S3 (Suspend to RAM) |
| Help | Select the highest ACPI sleep state the system will enter when the SUSPEND button is pressed. |

2.6 SMART Settings

| Main | Advanced | Chipset | Security | Boot | Save & Exit |
|---|----------|---------|----------|------|---|
| SMART Settings | | | | | Item help |
| SMART 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 |
| Version 2.18.1263. Copyright (C) 2017 American Megatrends, Inc. | | | | | |

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

2.7 NCT6104DSEC Super IO Configuration

| Main | Advanced | Chipset | Security | Boot | Save & Exit |
|---|----------|---------|----------|------|---|
| NCT6104DSEC Super IO Configuration | | | | | Item help |
| Super IO chip | | | | | NCT6104DSEC |
| ▶Serial Port 1 Configuration" | | | | | |
| ▶Serial Port 2 Configuration" | | | | | |
| ▶Serial Port 3 Configuration" | | | | | |
| ▶Serial Port 4 Configuration" | | | | | |
| | | | | | →←: Select Screen ↑↓: Select Item Enter: Select +/- : Change Opt F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit |
| Version 2.18.1263. Copyright (C) 2017 American Megatrends, Inc. | | | | | |

| | |
|------------|---|
| Field Name | Serial Port 1 Configuration" |
| Help | Set Parameters of Serial Port 1 (COMA) |
| Comment | Press Enter when selected to go into the associated Sub-Menu. |

| | |
|------------|---|
| Field Name | Serial Port 2 Configuration" |
| Help | Set Parameters of Serial Port 2 (COMB) |
| Comment | Press Enter when selected to go into the associated Sub-Menu. |

| | |
|------------|---|
| Field Name | Serial Port 3 Configuration" |
| Help | Set Parameters of Serial Port 3 (COMC) |
| Comment | Press Enter when selected to go into the associated Sub-Menu. |

| | |
|------------|---|
| Field Name | Serial Port 4 Configuration" |
| Help | Set Parameters of Serial Port 4 (COMD) |
| Comment | Press Enter when selected to go into the associated Sub-Menu. |

2.7.1 Serial port 1 Configuration

| Main | Advanced | Chipset | Security | Boot | Save & Exit |
|-----------------------------|----------|---------|----------|------|-------------------|
| Serial Port 1 Configuration | | | | | |
| Serial Port | | | | | Item help |
| Device Settings | | | | | |
| IO=240h; IRQ=11; | | | | | |
| | | | | | →←: 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 | Serial Port |
| Default Value | Enabled |
| Possible Value | Disabled Enabled |
| Help | Enable or Disable Serial Port (COM) |

| | |
|---------------|---|
| Field Name | Device Settings |
| Default Value | IO=240h; IRQ=11; |
| Comment | This field is not selectable. There is no help text associated with it. |

2.7.2 Serial port 2 Configuration

| Main | Advanced | Chipset | Security | Boot | Save & Exit | |
|-----------------------------|----------|---------|----------|------|-------------|---------------------|
| Serial Port 2 Configuration | | | | | | Item help |
| Serial Port | | | | | | [Enabled] |
| Device Settings | | | | | | IO=250h; IRQ=11; |

| | |
|---|---|
| | |
| | →←: 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 | Serial Port |
| Default Value | Enabled |
| Possible Value | Disabled Enabled |
| Help | Enable or Disable Serial Port (COM) |

| | |
|---------------|---|
| Field Name | Device Settings |
| Default Value | IO=250h; IRQ=11; |
| Comment | This field is not selectable. There is no help text associated with it. |

2.7.3 Serial port 3 Configuration

| Main | Advanced | Chipset | Security | Boot | Save & Exit |
|---|----------|---------|----------|------|---|
| Serial Port 3 Configuration | | | | | Item help |
| Serial Port | | | | | [Enabled] |
| Device Settings | | | | | IO=258h; IRQ=11; |
| Com3 set to | | | | | [3T/5R RS-232] |
| | | | | | →←: 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 | Serial Port |
| Default Value | Enabled |
| Possible Value | Disabled |

| | |
|------|-------------------------------------|
| | Enabled |
| Help | Enable or Disable Serial Port (COM) |

| | |
|---------------|---|
| Field Name | Device Settings |
| Default Value | IO=258h; IRQ=11; |
| Comment | This field is not selectable. There is no help text associated with it. |

| | |
|----------------|---|
| Field Name | Com3 set to |
| Default Value | 3T/5R RS-232 |
| Possible Value | 1T/1R RS-422 3T/5R RS-232 1T/1R RS-485 TX ENABLE Low Active 1T/1R RS-485 TX ENABLE High Active 1T/1R RS-422 with termination resistor 1T/1R RS-232 co-exists with RS485 1T/1R RS-485 with termination resistor TX ENABLE Low Active Disabled |
| Help | User Select Rs232 port config |

2.7.4 Serial port 4 Configuration

| Main | Advanced | Chipset | Security | Boot | Save & Exit |
|---|----------|---------|----------|------|---|
| Serial Port 4 Configuration | | | | | Item help |
| Serial Port | | | | | [Enabled] |
| Device Settings | | | | | IO=260h; IRQ=11; |
| Com4 set to | | | | | [3T/5R RS-232] |
| | | | | | →←: 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 | Serial Port |
| Default Value | Enabled |
| Possible Value | Disabled |
| | Enabled |

| | |
|------|-------------------------------------|
| Help | Enable or Disable Serial Port (COM) |
|------|-------------------------------------|

| | |
|---------------|---|
| Field Name | Device Settings |
| Default Value | IO=260h; IRQ=11; |
| Comment | This field is not selectable. There is no help text associated with it. |

| | |
|----------------|---|
| Field Name | Com4 set to |
| Default Value | 3T/5R RS-232 |
| Possible Value | 1T/1R RS-422 3T/5R RS-232 1T/1R RS-485 TX ENABLE Low Active 1T/1R RS-485 TX ENABLE High Active 1T/1R RS-422 with termination resistor 1T/1R RS-232 co-exists with RS485 1T/1R RS-485 with termination resistor TX ENABLE Low Active Disabled |
| Help | User Select Rs232 port config |

2.8 NCT6793D Super IO Configuration

| Main | Advanced | Chipset | Security | Boot | Save & Exit |
|---|----------|---------|----------|------|---|
| NCT6793D Super IO Configuration | | | | | <div>Item help</div> |
| Serial Port 1 | | | | | [Enabled] |
| Serial Port 2 | | | | | [Enabled] |
| Parallel Port | | | | | [Enabled] |
| Device Mode | | | | | [STD Printer Mode] |
| | | | | | →←: 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 | Serial Port 1 |
| Default Value | [Enabled] |

| | |
|----------------|-------------------------------------|
| Possible Value | Enabled Disabled |
| Help | Enable or Disable Serial Port (COM) |

| | |
|----------------|-------------------------------------|
| Field Name | Serial Port 2 |
| Default Value | [Enabled] |
| Possible Value | Enabled Disabled |
| Help | Enable or Disable Serial Port (COM) |

| | |
|----------------|--|
| Field Name | Parallel Port |
| Default Value | [Enabled] |
| Possible Value | Enabled Disabled |
| Help | Enable or Disable Parallel Port (LPT/LPTE) |
| Comment | SKU-S did not have Parallel port menu |

| | |
|----------------|--|
| Field Name | Device Mode |
| Default Value | [STD Printer Mode] |
| Possible Value | STD Printer Mode SPP Mode EPP-1.9 and SPP Mode EPP-1.7 and SPP Mode ECP Mode ECP-1.9 and SPP Mode |

| | |
|---------|--|
| | ECP-1.7 and SPP Mode |
| Help | Change the Printer Port mode. |
| Comment | SKU-S did not have Parallel port menu |

| Main | Advanced | Chipset | Security | Boot | Save & Exit | |
|---|----------|---------|----------|------|-------------|------------------------|
| Wake system from S5 | | | | | [Disabled] | Item help |
| Wake up hour | | | | | 0 | |
| Wake up minute | | | | | 0 | |
| Wake up second | | | | | 0 | |
| | | | | | | →←: 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 | 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) |

| | |
|----------------|---|
| Field Name | Wake up hour(Show when Wake system from S5 set to Fixed Time) |
| Default Value | 0 |
| Possible Value | 0-23 |
| Help | Select 0-23 For example enter 3 for 3am and 15 for 3pm |

| | |
|----------------|---|
| Field Name | Wake up minute(Show when Wake system from S5 set to Fixed Time) |
| Default Value | 0 |
| Possible Value | 0-59 |
| Help | 0 - 59 |

| | |
|----------------|---|
| Field Name | Wake up second(Show when Wake system from S5 set to Fixed Time) |
| Default Value | 0 |
| Possible Value | 0 - 59 |
| Help | 0 - 59 |

| | |
|----------------|--|
| Field Name | Wake up minute increase(Show when Wake system from S5 set to Dynamic Time) |
| Default Value | 1 |
| Possible Value | 1-5 |
| Help | 1 - 5 |

2.9 CPU Configuration

| Main | Advanced | Chipset | Security | Boot | Save & Exit |
|--|----------|---------|----------|------|-------------------|
| CPU Configuration | | | | | |
| Intel(R) Core(TM) CPU [CPU NAME] @ [CPU Freq.] GHz | | | | | Item help |
| CPU Signature | | | | | 406c3 |
| Microcode Patch | | | | | 33c |
| Max CPU Speed | | | | | 1600 MHz |
| Min CPU Speed | | | | | 480 MHz |
| Processor Cores | | | | | 2 |
| Intel HT Technology | | | | | Not Supported |
| Intel VT-x Technology | | | | | Supported |
| L1 Data Cache | | | | | 24 KB x 2 |
| L1 Code Cache | | | | | 32 KB x 2 |
| L2 Cache | | | | | 1024 KB x 1 |
| L3 Cache | | | | | Not Present |
| 64-bit | | | | | Supported |
| Intel Virtualization Technology | | | | | [Enabled] |
| | | | | | →←: 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 | CPU Configuration |
| Default Value | [Intel CPU Brand String] |
| Comment | This field is not selectable. There is no help text associated with it. |

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

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

| | |
|---------------|---|
| 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 it. |

| | |
|---------------|---|
| 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 it. |

| | |
|---------------|---|
| 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 | 64-bit |
| Default Value | Displays if 64-bit supported |
| 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 it. |

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

2.10 Network Stack Configuration

| Main | Advanced | Chipset | Security | Boot | Save & Exit |
|--|----------|---------|----------|------|---|
| <div> <div>Network stack</div> <div>[Enabled]</div> </div> <div> <div>Ipv4 PXE Support</div> <div>[Enabled]</div> </div> <div> <div>Ipv6 PXE Support</div> <div>[Enabled]</div> </div> | | | | | <div>Item help</div> <div>→←: Select Screen</div> <div>↑↓: Select Item</div> <div>Enter: Select</div> <div>+/- : Change Opt</div> <div>F1: General Help</div> <div>F2: Previous Values</div> <div>F3: Optimized Defaults</div> <div>F4: Save & Reset</div> <div>ESC: Exit</div> |
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| | |
|----------------|------------------------------------|
| Field Name | Network stack |
| Default Value | [Enabled] |
| 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. |

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

2.11 Platfrom trust technology

| Main | Advanced | Device | Chipset | Security | Boot | Save & Exit |
|-------------------|----------|--------|---------|----------|------|-------------|
| TPM Configuration | | | | | | Item help |
| fTPM [Enabled] | | | | | | |

| | |
|---|---|
| | →←: 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 | Compatibility Support Module Configuration |
|------------|--|

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

3. Chipset

| Main | Advanced | Chipset | Security | Boot | Save & Exit |
|---|----------|---------|----------|-----------------|--|
| Restore AC Power Loss | | | | [Power Off] | <div>Item help</div> |
| DeepSx Power Policies | | | | [Disabled] | |
| Output Panel Type | | | | [Disable] | |
| LVDS Panel Type | | | | [VBIOS Default] | |
| Front Panel Audio | | | | [Auto] | |
| DVMT Pre-Allocated | | | | [64M] | |
| DVMT Total Gfx Mem | | | | [256MB] | |
| Wake On Lan | | | | [Enable] | |
| OS Selection | | | | [Windows] | <div>→←: Select Screen</div> <div>↑↓: Select Item</div> <div>Enter: Select</div> <div>+/- : Change Opt</div> <div>F1: General Help</div> <div>F2: Previous Values</div> <div>F3: Optimized Defaults</div> <div>F4: Save & Reset</div> <div>ESC: Exit</div> |
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| | |
|----------------|---|
| Field Name | Restore AC Power State |
| Default Value | [Power Off] |
| Possible Value | Power off Power on Last State |
| Help | Select AC power state when power is re-applied after a power failure. |

| | |
|----------------|---|
| Field Name | DeepSx Power Policies |
| Default Value | Disabled |
| Possible Value | Disabled Enabled |
| Help | Configure the DeepSx Mode configuration. |
| Note | When enabled, “Wake On Lan” and “S5 RTC Wake Settings” are no function. |

| | |
|----------------|---------------------------------|
| Field Name | Output Panel Type |
| Default Value | Disable |
| Possible Value | LVDS eDP Disabled |
| Help | Select Output Panel Type |

| | |
|----------------|-----------------|
| Field Name | LVDS Panel Type |
| Default Value | VBIOS Default |
| Possible Value | VBIOS Default |

| | |
|---------|--|
| | 1024x768 LVDS 1366x768 LVDS 1680x1050 LVDS 1440x900 LVDS 1600x900 LVDS 1280x800 LVDS 1920x1080 LVDS |
| Help | Select LVDS panel used by Internal Graphics Device by selecting the appropriate setup item. |
| Comment | This field only show when Output Panel Type set to LVDS |

| | |
|----------------|---|
| Field Name | Front Panel Audio |
| Default Value | High Definition Front Panel |
| Possible Value | High Definition Front Panel Disabled |
| Help | Automatically or Manually select the type of audio front panel installed. |

| | |
|----------------|--|
| Field Name | DVMT Pre-Allocated |
| Default Value | [64M] |
| Possible Value | 64M /96M /128M /160M /192M /224M /256M /288M /320M 352M /384M /416M /448M /480M /512M |
| 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 | Wake On Lan |
| Default Value | Enabled |
| Possible Value | Disabled Enabled |
| Help | Enable or Disable the Wake on Lan |

| | |
|----------------|----------------------------|
| Field Name | OS Selection |
| Default Value | Windows |
| Possible Value | Windows Intel Linux |
| Help | Select the target OS. |

4.

| Main | Advanced | Chipset | Security | Boot | Save & Exit |
|---|----------|---------|----------|------------------------|-------------|
| Password Description | | | | Item help | |
| If Only the Administrator's password is set then this only limits access to Setup and is only asked for when entering Setup If ONLY the User's password is set, then this Is a power on password and must be entered to boot or enter Setup. In Setup the User will. have Administrator rights. The password length must be in the following range: | | | | | |
| Minimum Length | | | | 3 | |
| Maximum Length | | | | 20 | |
| Setup Administrator Password | | | | →← : Select Screen | |
| User Password | | | | ↑↓ : Select Item | |
| HDD Security Configuration | | | | Enter: Select | |
| P0:Device Name | | | | +/- : Change Opt | |
| Secure Boot | | | | F1: General Help | |
| | | | | F2: Previous Values | |
| | | | | F3: Optimized Defaults | |
| | | | | F4: Save & Reset | |
| | | | | ESC: Exit | |

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

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

| | |
|------------|---|
| Field Name | P0: Device Name |
| Help | HDD Security Configuration for selected drive |
| Comment | Press Enter when selected to go into the associated Sub-Menu. |

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

4.1 HDD Security Configuration

| Main | Advanced | Chipset | Security | Boot | Save & Exit |
|---|----------|---------|---------------|------------------------|-------------|
| HDD Password Description | | | | Item | help |
| Allow Access to Set, Modify and Clear | | | | | |
| Hard Disk User and Master Password. | | | | | |
| User Password need to be installed for | | | | | |
| Enabling Security. Master Password can | | | | | |
| Be Modified only when successfully unlocked | | | | | |
| With Master Password in POST. | | | | | |
| HDD PASSWORD CONFIGURATION: | | | | | |
| Security Supported | : | | Yes | →←: Select Screen | |
| Security Enabled | : | | No | ↑↓: Select Item | |
| Security Locked | : | | No | Enter: Select | |
| Security Frozen | : | | No | +/- : Change Opt | |
| HDD User Pwd Status | | | NOT INSTALLED | F1: General Help | |
| | | | | F2: Previous Values | |
| | | | | F3: Optimized Defaults | |
| | | | | F4: Save & Reset | |
| | | | | ESC: Exit | |
| Set User Password | | | | | |

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

4.2 Secure Boot Mode

| Main | Advanced | Chipset | Security | Boot | Save & Exit |
|---|----------|---------|----------|------|---|
| <div>System Mode</div> <div>Secure Boot</div> <div>Vendor Keys</div> <div>Attempt Secure Boot</div> <div>▶Enter Audit Mode</div> <div>▶Enter Deployed Mode</div> <div>Secure Boot Mode</div> <div>▶Key Management</div> | | | | | <div>Item help</div> <div></div> <div>→←: Select Screen</div> <div>↑↓: Select Item</div> <div>Enter: Select</div> <div>+/- : Change Opt</div> <div>F1: General Help</div> |
| Setup | | | | | |
| Not Active | | | | | |
| Not Active | | | | | |
| [Enabled] | | | | | |
| | | | | | |
| [Standard] | | | | | |

| | |
|---|--|
| | F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit |
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Note:

Security boot will not effect by load default.

| | |
|----------------|--|
| Field Name | System Mode |
| Default Value | Deployed |
| Possible Value | Deployed /User/Audit/Setup |
| Comment | <p>This field is not selectable. There is no help text associated with it.</p> <p>Depend on use select .If Secure Boot Mode→set to customized→</p> <p>Key Management→Reset to Setup Mode system will back to setup</p> |

| | |
|---------------|---|
| Field Name | Secure Boot |
| Default Value | Not Active |
| Comment | This field is not selectable. There is no help text associated with it. |

| | |
|---------------|---|
| Field Name | Vendor Keys |
| Default Value | Not Active |
| Comment | This field is not selectable. There is no help text associated with it. |

| | |
|---------------|---------------------|
| Field Name | Attempt Secure Boot |
| Default Value | [Enabled] |

| | |
|----------------|---|
| Possible Value | Enabled / Disabled |
| Help | Secure Boot activated when Platform Key(PK) is enrolled, System mode is User/Deployed, and CSM function is disabled |

| | |
|----------------|--|
| Field Name | Enter Audit Mode |
| Possible Value | Yes / No |
| Help | Enter Audit Mode.If a current System Mode is User – PK variable will be <u>erased</u> on transition to Audit |
| Comment | This filed only show when Secure Boot mode change from Customized to Standard.And if user need to into Auidt mode , “Secure Boot mode“ need to be Customized then will be effective. |

| | |
|------------|--|
| Field Name | Enter Deployment mode |
| Help | Enter Deployment mode |
| Comment | This filed only show when Secure Boot mode change from Customized to Standard. |

| | |
|----------------|---|
| Field Name | Secure Boot Mode |
| Default Value | [Standard] |
| Possible Value | Standard / Custom |
| Help | Secure Boot Mode - Custom & Standard, Set UEFI Secure Boot Mode to STANDARD mode or CUSTOM mode, this change is effect after save. And after reset, the mode will return to STANDARD mode |

| | |
|------------|--|
| Field Name | Key Management |
| Help | Enables experienced users to modify Secure Boot variables without full authentication. |
| Comment | After Select Secure Boot Mode:[Customer] |

| | |
|--|---|
| | Press Enter when selected to go into the associated Sub-Menu. |
|--|---|

4.3 Key Managerment

| Main | Advanced | Chipset | Security | Boot | Save & Exit | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|----------|---------|------------|---|-------------|------|------------|-------------------|---|---|--|-------------------|---|---|--|------------------------|---|---|--|-----------------------|---|---|--|------------------------|---|---|--|------------------------|---|--|---|--|--|
| Provision Factory Default Keys | | | | [Disabled] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>▶Install Factory Default Keys</p> <p>▶Save All Secure Boot Variables</p> | | | | <p>Item help</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Secure Boot variable</th> <th>size</th> <th>key#</th> <th>key source</th> </tr> </thead> <tbody> <tr> <td>▶Platform Key(PK)</td> <td>0</td> <td>0</td> <td></td> </tr> <tr> <td>▶Key Exchange Key</td> <td>0</td> <td>0</td> <td></td> </tr> <tr> <td>▶Authorized Signatures</td> <td>0</td> <td>0</td> <td></td> </tr> <tr> <td>▶Forbidden Signatures</td> <td>0</td> <td>0</td> <td></td> </tr> <tr> <td>▶Authorized TimeStamps</td> <td>0</td> <td>0</td> <td></td> </tr> <tr> <td>▶OsRecovery Signatures</td> <td>0</td> <td></td> <td>0</td> </tr> </tbody> </table> | | | | Secure Boot variable | size | key# | key source | ▶Platform Key(PK) | 0 | 0 | | ▶Key Exchange Key | 0 | 0 | | ▶Authorized Signatures | 0 | 0 | | ▶Forbidden Signatures | 0 | 0 | | ▶Authorized TimeStamps | 0 | 0 | | ▶OsRecovery Signatures | 0 | | 0 | | |
| Secure Boot variable | size | key# | key source | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▶Platform Key(PK) | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▶Key Exchange Key | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▶Authorized Signatures | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▶Forbidden Signatures | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▶Authorized TimeStamps | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▶OsRecovery Signatures | 0 | | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | <p>→←: Select Screen</p> <p>↑↓: Select Item</p> <p>Enter: Select</p> <p>+/- : Change Opt</p> <p>F1: General Help</p> <p>F2: Previous Values</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | |
|---|--|
| | F3: Optimized Defaults F4: Save & Reset ESC: Exit |
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| | |
|----------------|--|
| Field Name | Provision Factory Default Key |
| Default Value | [Disabled] |
| Possible Value | Enabled Disabled |
| Help | Allow to provision factory default Secure Boot keys when System is in Setup Mode |

| | |
|------------|--|
| Field Name | Install Factory Default Key |
| Help | Force System to User Mode - install all Factory Default keys |
| Comment | Provision Factory Default keys set to "Enable" |

| | |
|------------|--|
| Field Name | Reset to Setup Mode |
| Help | Force System to Setup Mode - clear all Secure Boot Variables |
| Comment | Provision Factory Default keys set to "Disable" |

| | |
|------------|---|
| Field Name | Save All Secure Boot Variables |
| Help | Save NVRAM content of Secure Boot policy variables to the files (EFI_SIGNATURE_LIST data format) in root folder on a target file system |

| | |
|--|--------|
| | device |
|--|--------|

| | |
|----------------|--|
| Field Name | Platform Key (PK) : 0 0 |
| Possible Value | Set New Key Append Key |
| Help | Enroll Factory Defaults or load keys 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.Authenticated UEFI Variable Key origin legend: Factory Default, Custom, Mixed * user modified via the Setup |

| | |
|----------------|--|
| Field Name | Key Exchange Key : 0 0 |
| Possible Value | Set New Key Append Key |
| Help | Enroll Factory Defaults or load keys 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.Authenticated UEFI Variable Key origin legend: Factory Default, Custom, Mixed * user modified via the Setup |

| | |
|----------------|--|
| Field Name | Forbidden Signature : 0 0 |
| Possible Value | Set New Key Append Key |
| Help | Enroll Factory Defaults or load keys 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.Authenticated UEFI Variable Key origin legend: Factory Default, Custom, Mixed * user modified via the Setup |

| | |
|----------------|----------------------------|
| Field Name | Authorized Signature : 0 0 |
| Possible Value | Set New Key |

| | |
|------|--|
| | Append Key |
| Help | Enroll Factory Defaults or load keys 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.Authenticated UEFI Variable Key origin legend: Factory Default, Custom, Mixed * user modified via the Setup |

| | |
|----------------|--|
| Field Name | Authorized TimeStamps : 0 0 |
| Possible Value | Set New Key Append Key |
| Help | Enroll Factory Defaults or load keys 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.Authenticated UEFI Variable Key origin legend: Factory Default, Custom, Mixed * user modified via the Setup |

| | |
|----------------|--|
| Field Name | OsRecovery Signatures : 0 0 |
| Possible Value | Set New Key Append Key |
| Help | Enroll Factory Defaults or load keys 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.Authenticated UEFI Variable Key origin legend: Factory Default, Custom, Mixed * user modified via the Setup |

5. Boot

| Main | Advanced | Chipset | Boot | Security | Save & Exit |
|--------------------------------------|----------|---------|------|-----------------|-------------------|
| Boot Configuration | | | | Item | help |
| Setup Prompt Timeout | | | | 3 | |
| Bootup NumLock State | | | | [On] | |
| Fast Boot | | | | [Enable] | |
| Boot mode select | | | | [UEFI] | |
| FIXED BOOT ORDER Priorities | | | | | |
| Boot Option #1 | | | | [Hard Disk] | |
| Boot Option #2 | | | | [CD/DVD] | |
| Boot Option #3 | | | | [USB Hard Disk] | |
| Boot Option #4 | | | | [USB CD/DVD] | |
| Boot Option #5 | | | | [USB Key] | |
| Boot Option #6 | | | | [USB Floppy] | |
| Boot Option #7 | | | | [Network] | |
| UEFI CD/DVD ROM Drive BBS Priorities | | | | | →←: Select Screen |
| UEFI Hard Disk Drive BBS Priorities | | | | | ↑↓: Select Item |
| UEFI NETWORK Drive BBS Priorities | | | | | Enter: Select |
| | | | | | +/- : Change Opt |
| | | | | | F1: General Help |

| | |
|---|-------------------------------|
| UEFI USB CD/DVD ROM Drive BBS Priorities | F2: Previous Values |
| UEFI USB Hard Disk Drive BBS Priorities | F3: Optimized Defaults |
| UEFI USB KEY Drive BBS Priorities | F4: Save & Reset |
| | ESC: Exit |
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| | |
|----------------|---|
| 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 | Fast Boot |
| Default Value | [Enabled] |
| Possible Value | Enabled Disabled |
| Help | Enable or Disable FastBoot features. Most probes are skipped to reduce time cost during boot. |

| | |
|----------------|-------------------------|
| Field Name | Boot mode select |
| Default Value | [UEFI] |
| Possible Value | UEFI |
| Help | Select boot mode UEFI. |

Boot mode select = UEFI

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

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

| | |
|----------------|--|
| Field Name | Boot Option #3 |
| Default Value | [USB Hard Disk] |
| Possible Value | CD/DVD, Hard Disk, Network, USB CD/DVD, USB Hard Disk, USB KEY, USB Floppy, USB Lan |
| Help | Set the system boot order |

| | |
|------------|-----------------------|
| Field Name | Boot Option #4 |
|------------|-----------------------|

| | |
|----------------|--|
| Default Value | [USB CD/DVD] |
| Possible Value | CD/DVD, Hard Disk, Network, USB CD/DVD, USB Hard Disk, USB KEY, USB Floppy, USB Lan |
| Help | Set the system boot order |

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

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

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

6. Save & Exit

| Main | Advanced | Chipset | Security | Boot | Save & Exit |
|---|----------|---------|----------|------|---|
| <p>Save Options</p> <p>Save Changes and Exit</p> <p>Discard Changes and Exit</p> <p>Save Changes and Reset</p> <p>Discard Changes and Reset</p> <p>Restore Defaults</p> | | | | | <p>Item help</p> <p>→←: Select Screen</p> <p>↑↓: Select Item</p> <p>Enter: Select</p> <p>+/- : Change Opt</p> <p>F1: General Help</p> <p>F2: Previous Values</p> <p>F3: Optimized Defaults</p> <p>F4: Save & Reset</p> <p>ESC: Exit</p> |
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| | |
|------------|--------------|
| Field Name | Save Options |
|------------|--------------|

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

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

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

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

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