

MiTAC Panel PC System

P156-10AI

Product Guide

Front View



Rear View



Bottom View



1 ⏻ Power

2 ↺ Reset

3 ≡ 8 bit GPIO

4 +--+ DC-in

5 USB 3.0

6 +--+ DC-in

7 USB 3.0

8 DP DisplayPort

9 ≡ HDMI

10 Giga LAN

11 USB 3.0

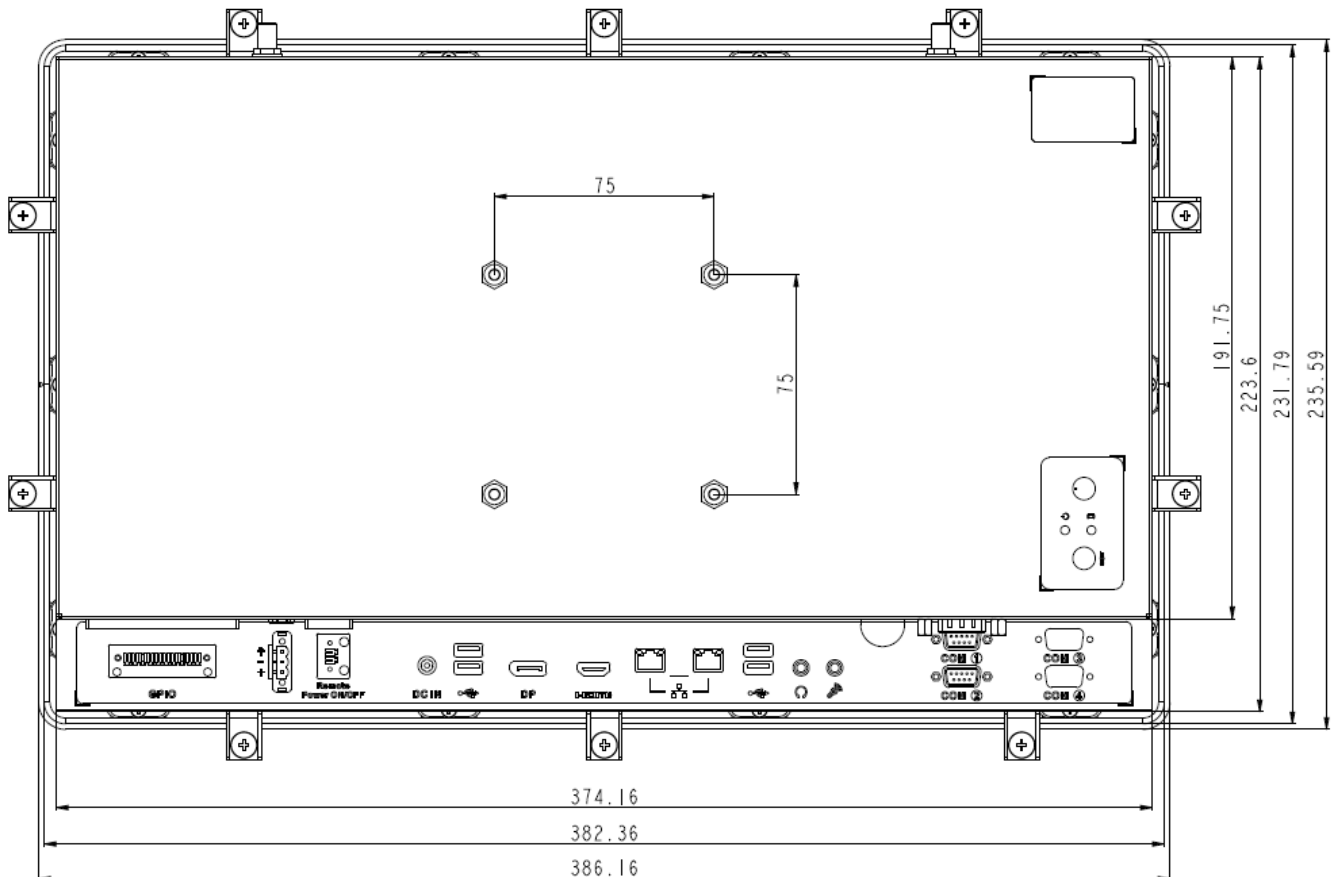
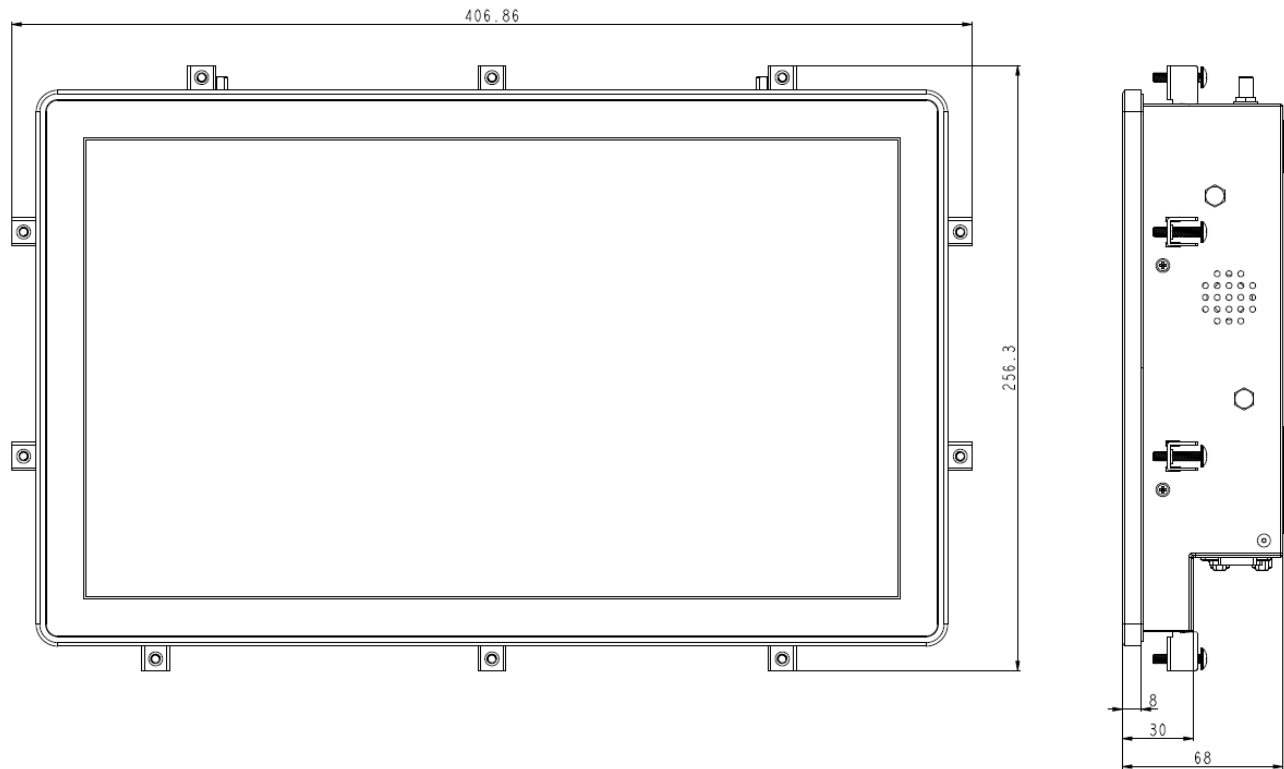
12 Mic-in

13 Line-out

14 COM

Mechanical Dimension

P156-10AI dimension: 386.16mm x 235.59mm x 68mm



Product Specifications

LCD	DISPLAY TYPE	15.6" TFT-LCD
	MAX. RESOLUTION	1920 x 1080
	MAX. COLORS	16.2M (8 bit / color)
	LUMINANCE (cd/m2)	450
	VIEWING ANGLE (H/V)	170° / 170°
	LED BACKLIGHT LIFETIME (hrs)	50,000
	HIGH BRIGHTNESS	Option
TOUCH SCREEN	TYPE	P-CAP
	TOUCH SCREEN	True-flat 10 points
	AR/AG	Option
SYSTEM	PROCESSOR	Intel® Apollo Lake-M N3350 Processor / Option: N4200
	CHIPSET	Intel® SoC Integrated
	SYSTEM MEMORY	DDR3L 1866 MHz / 2 x 204-pin SO-DIMM / Max. 8GB (Non-ECC)
	ETHERNET	2 x Intel® I211-AT Giga LAN
	I/O PORT	1 x 3-pin Phoenix type terminal block DC input / 2 x RS232 / 2 x RJ45 / 1 x 8bit GPIO terminal block / 1 x DisplayPort 1.2 / 1 x 2-pin remote power on/off / 1 x DC Jack / 4 x USB 3.0 / 1 x HDMI 1.4 / 1 x Line-out / 1 x Mic-in
	EXPANSION SLOT	1 x M.2 2280 B key / 1 x M.2 2230 E key(PCIe / USB)
	STORAGE	1 x SATA 2.5" HDD / SSD bay
	STEREO SPEAKER	2 x 2W
	OS SUPPORT	Windows® 10 enterprise 1703

POWER REQUIREMENT	WATCHDOG TIMER	1~255 steps by software program
	POWER INPUT	DC-in 8~24V
	POWER ADAPTER	AC to DC / DC19V / 3.4A / 65W adapter
MECHANICAL	MOUNTING	VESA 75 / Panel Mount
	DIMENSIONS (W X D X H)	386.16 x 235.59 x 68mm
	WEIGHT	TBD
ENVIRONMENTAL	OPERATING TEMPERATURE	-20°C ~ 60°C (4 ~ 140°F)
	STORAGE TEMPERATURE	-20 ~ 70°C (-4 ~158°F)
	STORAGE HUMIDITY	10% ~ 95% @40°C non-condensing
	VIBRATION RESISTANCE	Operating Random vibration Test 5-500Hz, 0.3 Grms@with HDD / 2Grms @with SSD, follow IEC 60068-2-64
	SHOCK RESISTANCE	Operating 10 G peak acceleration (11 ms duration) / follow IEC 60068-2-27
	EMC	CE / FCC Class B
	FRONT PANEL PROTECTION	IP65 Compliant

Quick Installation Guide

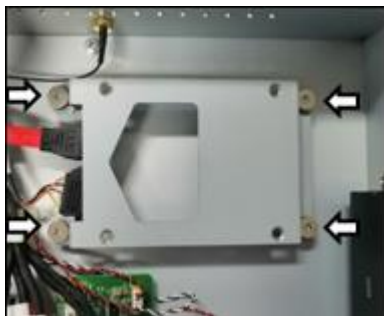


Remove 10pcs rear cover screws.

(Torque 4.5 +/-0.5 Kgf-cm)



Open rear cover



Disassemble the HDD bracket.

(Torque 4.5 +/-0.5 Kgf-cm)



Install HDD with the screws in AK.

(Torque 4.5 +/-0.5 Kgf-cm)



Install HDD bracket and connect the cables.

(Torque 4.5 +/-0.5 Kgf-cm)



Install SODIMMs



Install antennas in rear cover (option).

(Torque 4.5 +/-0.5 Kgf-cm)

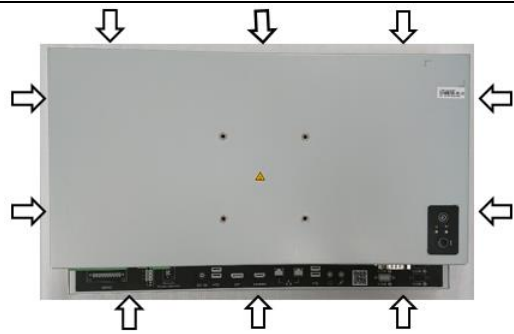


Install WIFI card and connect the antennas. (option)

(Torque 4.5 +/-0.5 Kgf-cm)



Remove the protection of thermal pad release paper before the assembly of rear cover



Secure 10pcs rear cover screws.

(Torque 4.5 +/-0.5 Kgf-cm)

[Note] need manually install drivers

Please check the latest drivers on MitAC official website

<http://www.mitacmct.com/IndustrialPanelPC=P156-10AI=P156-10AI=downloads=EN>

MITAC Embedded System

P156-10AI

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]	
Version 2.18.1263. Copyright (C) 2017 American Megatrends, Inc.		

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
<div> <div>LAN1</div> <div>[Enable]</div> </div> <div> <div>LAN2</div> <div>[Enable]</div> </div> <div> <div>Wireless LAN RF</div> <div>[Enable]</div> </div> <div> <div>Intel(R) I211 Gigabit Network Connection</div> <div>-xx:xx:xx:xx:...</div> </div> <div> <div>Intel(R) I211 Gigabit Network Connection -xx:xx:xx:xx:...</div> </div> <div> <div>Driver Health</div> <div>▶ ACPI Settings</div> <div>▶ SMART settings</div> <div>▶ NCT6104DSEC Super IO Configuration</div> <div>▶ NCT6793D Super IO Configuration</div> <div>▶ S5 RTC Wake Settings</div> <div>▶ CPU Configuration</div> <div>▶ Network Stack Configuration</div> <div>▶ Platform Trust Technology</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>
Version 2.18.1263. Copyright (C) 2017 American Megatrends, Inc.					

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
<p>► NIC Configuration</p>					<p>Item help</p>
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]
MAC Address					00:22:4D:B8:C3:48
					<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>
Version 2.18.1263. Copyright (C) 2017 American Megatrends, Inc.					

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
<div>Link Speed [Auto Negotiated]</div> <div>Wake On Lan [Enable]</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>
Version 2.18.1263. Copyright (C) 2017 American Megatrends, Inc.					

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 F2: Previous Values

MAC Address	00:22:4D:B8:C3:48	F3: Optimized Defaults F4: Save & Reset ESC: Exit
Version 2.18.1263. Copyright (C) 2017 American Megatrends, Inc.		

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

MainAdvancedChipsetSecurityBootSave & Exit

Link Speed

[Auto Negotiated]

Wake On Lan

[Enable]

Itemhelp

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

	F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit
Version 2.18.1263. Copyright (C) 2017 American Megatrends, Inc.	

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

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.

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

Main	Advanced	Chipset	Security	Boot	Save & Exit	
Controller 73999398 Child 0					Healthy	Item help
Intel(R) I211 Gigabit Network Connection					Healthy	
						→←: 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
Version 2.18.1263. Copyright (C) 2017 American Megatrends, Inc.	

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		<div>Item help</div> <div>Super IO chipNCT6104DSEC</div> <div>Serial Port 1 Configuration"</div> <div>Serial Port 2 Configuration"</div> <div>Serial Port 3 Configuration"</div> <div>Serial Port 4 Configuration"</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>			
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
Version 2.18.1263. Copyright (C) 2017 American Megatrends, Inc.	

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					
Serial Port					Item help
[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
Version 2.18.1263. Copyright (C) 2017 American Megatrends, Inc.	

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					<div>Item help</div>
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
Version 2.18.1263. Copyright (C) 2017 American Megatrends, Inc.					

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					<div>Item help</div>
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
Version 2.18.1263. Copyright (C) 2017 American Megatrends, Inc.					

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					Item help
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
Version 2.18.1263. Copyright (C) 2017 American Megatrends, Inc.					

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
Version 2.18.1263. Copyright (C) 2017 American Megatrends, Inc.						

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
Version 2.18.1263. Copyright (C) 2017 American Megatrends, Inc.	

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>
Version 2.18.1263. Copyright (C) 2017 American Megatrends, Inc.					

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 Trust Platform 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
Version 2.18.1263. Copyright (C) 2017 American Megatrends, Inc.	

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]		
DeepSx Power Policies			[Disabled]		
Output Panel Type			[Disable]		
Front Panel Audio			[Auto]		
DVMT Pre-Allocated			[64M]		
DVMT Total Gfx Mem			[256MB]		
Wake On Lan			[Enable]		
OS Selection			[Windows]		
			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	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 DVMPT 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				→←: Select Screen	
in the following range:				↑↓: Select Item	
Minimum Length		3		Enter: Select	
Maximum Length		20		+/- : Change Opt	
Setup Administrator Password				F1: General Help	
User Password				F2: Previous Values	
				F3: Optimized Defaults	
				F4: Save & Reset	
HDD Security Configuration				ESC: Exit	
P0:Device Name					
► Secure Boot					

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
					Item help
System Mode				Setup	
Secure Boot				Not Active	
Vendor Keys				Not Active	
Attempt Secure Boot				[Enabled]	
▶ Enter Audit Mode					→←: Select Screen
▶ Enter Deployed Mode					
Secure Boot Mode				[Standard]	↑↓: Select Item
▶ Key Management					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.	

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 Management

Main	Advanced	Chipset	Security	Boot	Save & Exit
Provision Factory Default Keys				[Disabled]	
				Item help	
▶ Install Factory Default Keys					
▶ Save All Secure Boot Variables					
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	
				→←: 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	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	
UEFI USB CD/DVD ROM Drive BBS Priorities				+/- : Change Opt	
				F1: General Help	
				F2: Previous Values	

UEFI USB Hard Disk Drive BBS Priorities	F3: Optimized Defaults
UEFI USB KEY Drive BBS Priorities	F4: Save & Reset
	ESC: Exit
Version 2.18.1263. Copyright (C) 2017 American Megatrends, Inc.	

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>
Version 2.18.1263. Copyright (C) 2017 American Megatrends, Inc.					

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.