

D210

User Manual (Version 1.0)

Introduction

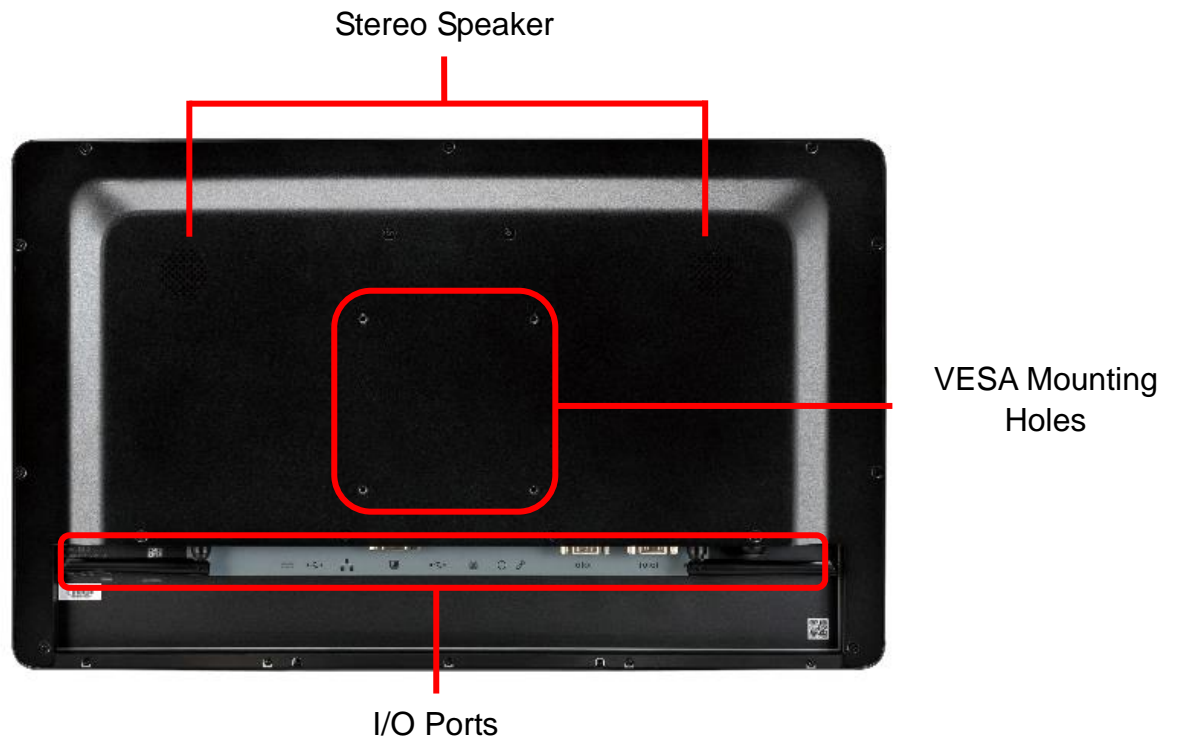
D210 series are 21.5" ultra-thin and wide-screen fan-less Panel PC. D210-10RI is powered by Intel Braswell N3160 quad-core processor and up to 8GB DDR3L memory. The distinct aluminum extrusion frame with matte black or silver finish gives the system an understated luxury and elegant look. The series also featuring a bright TFT-LCD with LED backlight display and true flat 10-point projective capacitive multi-touch front panel that's IP65 compliant, along with optional universal snap-in peripherals (MSR, Smart card reader, NFC/RFID reader, barcode scanner, camera), making it perfect for diversified self-service and interactive signage markets including retail, hospitality, gaming, corporate, healthcare and light industrial applications.

Front View

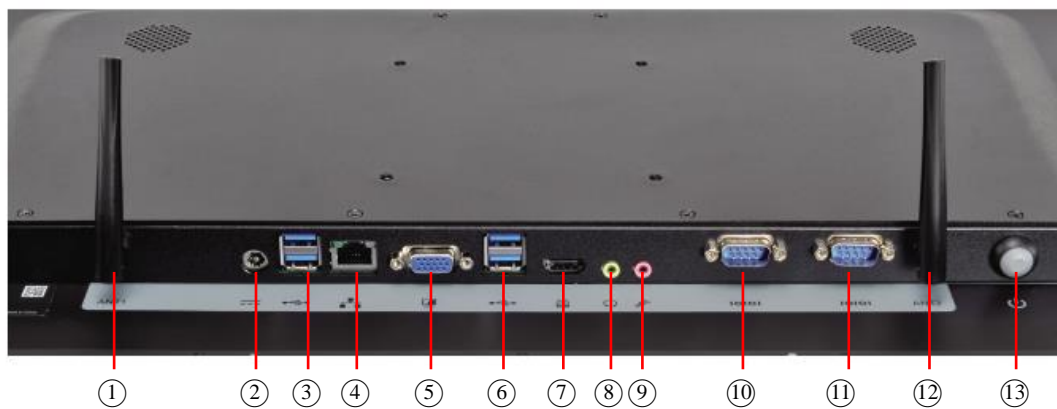


21.5 inch TFT LCD with PCAP touch screen

Rear View



Bottom View



- | | | |
|------------------|--------------|--------------------|
| ① ⑫ Antenna hole | ⑤ VGA | ⑨ Mic-in |
| ② DC input | ⑥ 2 x USB3.0 | ⑩ ⑪ RS-232/422/485 |
| ③ 2 x USB3.0 | ⑦ HDMI | ⑬ Power button |
| ④ LAN | ⑧ Line-out | |

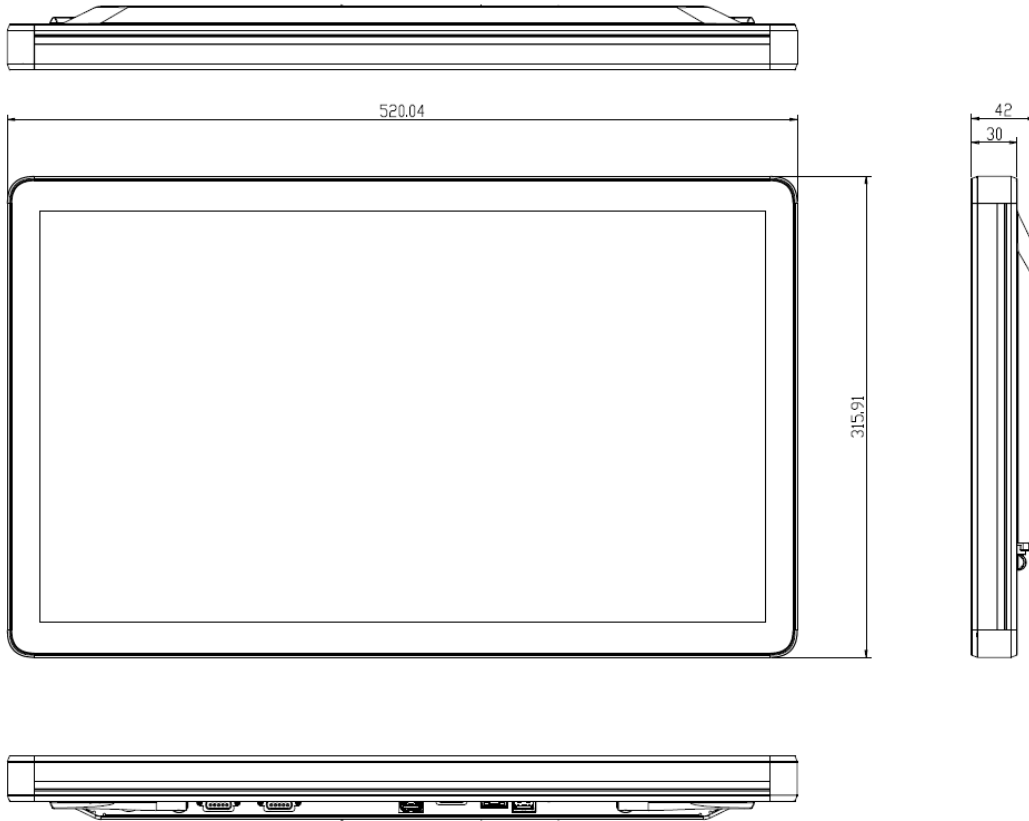
Side View



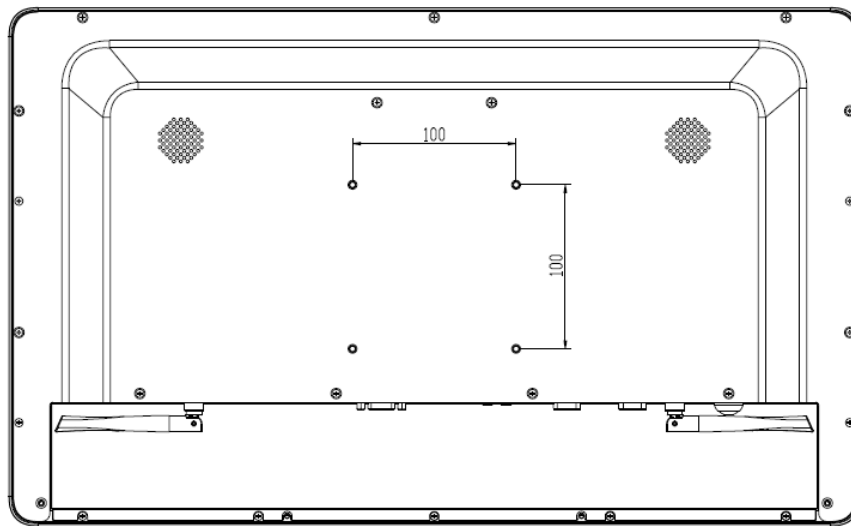
Groove design for optional modules

Mechanical Dimension

D210-10RI dimension: 520 x 315 x 42 mm



VESA mounting: 100 x 100 mm



Product Specifications

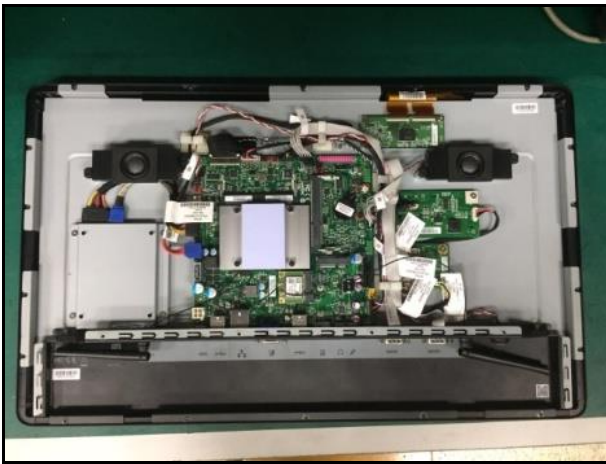
Model Name	D210-10RI
Motherboard	PD10RI
Processor	Intel Celeron Processor N3160 (Quad core, 2M Cache, up to 2.24 GHz)
System Memory	Support for up to 8 GB of system memory on a single DDR3L SO-DIMM (or 4GB each by SO-DIMM)
Processor Graphic	Intel® HD Graphics 400 (Graphics Burst Frequency 640 MHz)
Touch Display	
LCD Size	21.5" TFT LCD with LED Backlight
Brightness	250 nits
Resolution	1920 x 1080
Viewing Angle	178°/178°
Touch Screen	True-flat 10 points projective capacitive
Storage	
HDD/SSD	1 x 2.5 internal HDD/SSD bay
Expansion	
mPCIe	1 x full-length slot (PCIe/SATA/USB signal)
mPCIe	1 x half-length slot (PCIe/USB signal)
I/O Ports	
DC Jack	1 (8 V to 24 V wide-range voltage input)
USB3.0	4
GigaLAN (10/100/1000)	1
VGA	1
HDMI-out	1
Line-out	1
Mic-in	1
Serial Port	2 x RS-232/422/485
Thermal Solution	
Thermal Solution	Fanless

Audio	
Stereo Speaker	3W x 2
Power	
Power Supply	65W/19V
Certification	
EMC & Safety	CE/FCC Class A
Environment	
Operating Temperature	0°C ~ 40°C (32°F~104°F)
Storage Temperature	-20°C ~ 60°C(-4°F~140°F)
Relative Humidity	10%~95% @40°C non-condensing
Front Panel Protection	IP65 Compliant
Dimension	520 x 315 x 42 (mm)
Weight	10 kg (22.04 lb)
Mounting	100 x 100 mm VESA
OS Support	Win 10 IoT Enterprise 64-bit
	Ubuntu, Android by project request

Quick Installation Guide



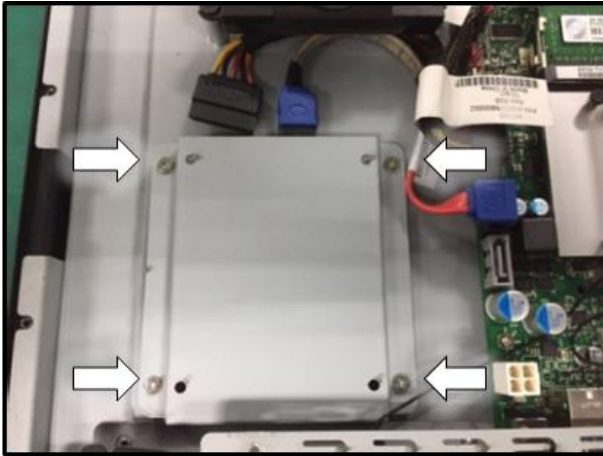
Remove cover screws
(Torque 3.5 +/-0.5 Kgf-cm)



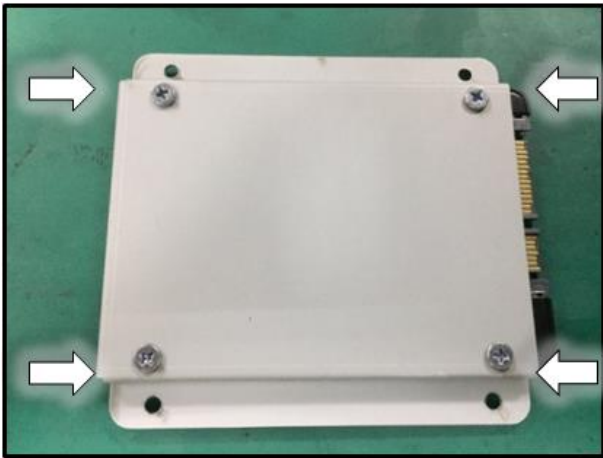
Open the cover



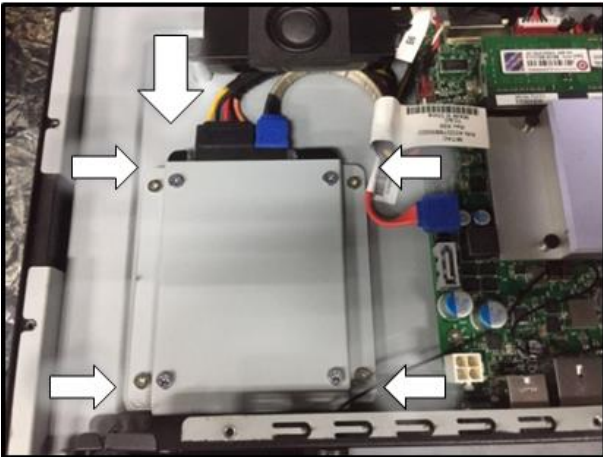
Install DIMMs



Disassemble the HDD bracket
(Torque 5.5 +/-0.5 Kgf-cm)



Install HDD
(Torque 5.5 +/-0.5 Kgf-cm)

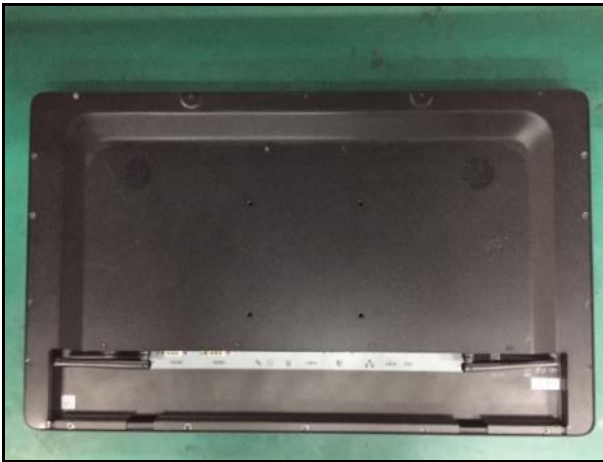


Install HDD bracket and connect
the SATA cable
(Torque 5.5 +/-0.5 Kgf-cm)



Install wifi card and connect
antennas

(Torque 2 +/- 0.2 Kgf-cm)

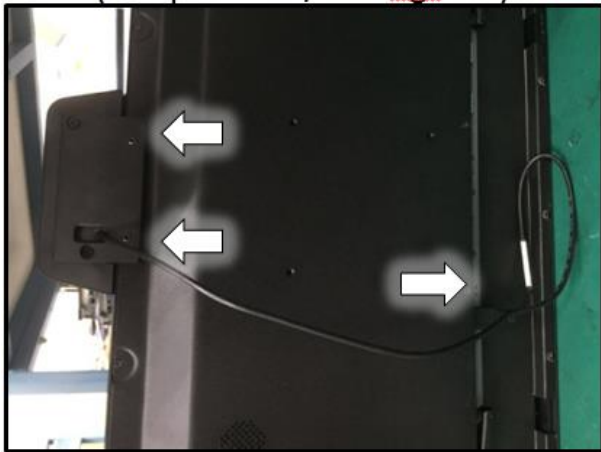


Secure cover screws

(Torque 3.5 +/-0.5 Kgf-cm)



Install peripheral module on
chassis frame



Use hex driver to fix the module
and connect USB cable

BIOS Information

1. **MAIN PAGE**

Main		Advanced	Chipset	Security	Boot	Save & Exit
BIOS Information						Item help
BIOS Vendor	American Megatrends					
Core Version	5.11					
Compliancy	UEFI 2.4; PI 1.3					
BIOS Version	D7530X01					
Build Date	05/04/2015					
Processor Information						
Intel(R) Celeron(R) CPU N3050 @ 1.60GHz						
Memory Information						
Total Memory	8192 MB (DDR3L)					
Memory Slot 0	4096MB					
Memory Slot 1	4096MB					
System Language	[English]					
System Date	[Mon, mm/dd/yyyy]					
System Time	[hh:mm:ss]					
→←: Select Screen ↑↓: Select Item Enter: Select +/- : Change Opt F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit						
Version 2.17.1249. Copyright (C) 2011 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	5.11
Comment	This field is not selectable. There is no help text associated with it.

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

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

Field Name	Build Date
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	Memory Information
Value	Display the installed Memory size, type etc..
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 Slot 0
Default Value	Memory in the DIMM.
Comment	This field is not selectable. There is no help text associated with it.

Field Name	Memory Slot 1
Default Value	Memory in the DIMM.
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.

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
<ul style="list-style-type: none"> ▶ RealTek PCIe GBE Family Controller (MAC:00:22:4D:7F:87:60) ▶ ACPI Settings ▶ SMART settings ▶ NCT6104D Super IO Configuration ▶ S5 RTC Wake Settings ▶ CPU Configuration ▶ SATA Configuration ▶ Network Stack Configuration ▶ CSM Configuration 					
					<p>→←: Select Screen</p> <p>↑↓: Select Item</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	RealTek PCIe GBE Family Controller (MAC:00:22:4D:7F:87:60)
Help	Get driver information and configure Realtek Ethernet controller parameter.
Comment	Press Enter when selected to go into the associated Sub-Menu.

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	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	SATA Configuration
Help	SATA Devices Configuration.
Comment	Press Enter when selected to go into the associated Sub-Menu.

Field Name	NCT6104D Super IO Configuration
Help	SIO configuration
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	CSM Configuration
Help	CSM configuration: Enable/Disable, Option ROM execution settings,etc.
Comment	Press Enter when selected to go into the associated Sub-Menu.

2.1 REALTEK PCIE GBE FAMILY CONTROLLER (MAC:00:22:4D:7F:87:60)

(If Network Stack IPv4/IPv6 enabled, create by RealTek UEFI PXE Driver)

Main	Advanced	Chipset	Security	Boot	Save & Exit
Driver Information Driver Name: Realtek UEFI UNDI Driver Driver Version: 2.035 Driver Released Date: 2015/03/30 Device Information Device Name: Realtek PCIe GBE Family PCI Slot: 03:00:00 MAC Address: 00:22:4D:7F:87:60					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	Driver Name:
Default Value	Installed UEFI Driver Name
Comment	This field is not selectable. There is no help text associated with it.

Field Name	Driver Version:
Default Value	Installed UEFI Driver Version
Comment	This field is not selectable. There is no help text associated with it.

Field Name	Driver Released Date:
Default Value	Installed UEFI Driver Release Date
Comment	This field is not selectable. There is no help text associated with it.

Field Name	Device Name:
Default Value	UEFI driver support device
Comment	This field is not selectable. There is no help text associated with it.

Field Name	PCI Slot:
Default Value	Device PCI Bus/Device/Number
Comment	This field is not selectable. There is no help text associated with it.

Field Name	MAC Address:
Default Value	LAN Device Mac address
Comment	This field is not selectable. There is no help text associated with it.

Field Name	Patent Information
Default Value	This product is covered by one or US6,570,884,US6,115,776 and US6,
Comment	This field is not selectable. There is no help text associated with it.

2.2 ACPI SETTINGS

Main	Advanced	Chipset	Security	Boot	Save & Exit
ACPI Settings					Item help
Enable	ACPI	Auto Configuration	[Disabled]		
Enable	Hibernation		[Enabled]		
ACPI Sleep State			[S3 (Suspend to RAM)]		
					→←: 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	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.

2.3 SMART SETTINGS

Main	Advanced	Chipset	Security	Boot	Save & Exit
SMART Settings SMART Self Test [Disabled]					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	SMART Self Test
Default Value	[Disabled]
Possible Value	Disabled Enabled
Help	Run SMART Self Test on all HDDs during POST.

2.4 NCT6104D SUPER IO CONFIGURATION

Main	Advanced	Chipset	Security	Boot	Save & Exit
NCT6104D Super IO Configuratio					Item help
Super IO Chip		NCT6104D			→←: Select Screen
▶ Serial Port 1 Configuration					↑↓: Select Item
▶ Serial Port 2 Configuration					Enter: Select
▶ Rs232 port config					+/- : Change Opt
					F1: General Help
					F2: Previous Values
					F3: Restore Legacy Defaults
					F4: Save & Reset
					ESC: Exit
Version 2.17.1254. Copyright (C) 2015 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	Rs232 port config
Help	User Select Rs232 port config
Comment	Press Enter when selected to go into the associated Sub-Menu.

2.4.1 Serial Port 1 Configuration

Main		Advanced	Chipset	Security	Boot	Save & Exit
Serial Port 1 Configuration						Item help
Serial Port		[Enabled]				
Device Settings		IO=3E8;IRQ=5;				
Version 2.17.1254. Copyright (C) 2015 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=3E8;IRQ=5;
Comment	This field is not selectable. There is no help text associated with it. This will hide when device set to disable.

2.4.2 Serial Port 2 Configuration

Main		Advanced	Chipset	Security	Boot	Save & Exit
Serial Port 2 Configuration						Item help
Serial Port		[Enabled]				→←: Select Screen
Device Settings		IO=2E8h; IRQ=5				↑↓: Select Item
						Enter: Select
						+/- : Change Opt
						F1: General Help
						F2: Previous Values
						F3: Restore Legacy Defaults
						F4: Save & Reset
						ESC: Exit
Version 2.17.1254. Copyright (C) 2015 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=2E8h; IRQ=5
Comment	This field is not selectable. There is no help text associated with it. This will hide when device set to disable.

2.4.3 RS232 port config

Main	Advanced	Chipset	Security	Boot	Save & Exit
RS232 port config					Item help
Com1 set to					[3T/5R RS-232]
Com2 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 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.					

Field Name	Com1 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-422 with termination resistor 1T/1R RS-485 with termination resistor TX ENABLE Low Active Disabled
Help	User Select Rs232 port config

Field Name	Com2 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-422 with termination resistor 1T/1R RS-485 with termination resistor TX ENABLE Low Active Disabled
Help	User Select Rs232 port config

2.5 S5 RTC WAKE SETTINGS (NO FUNCTION WHEN DEEPSX POWER POLICIES ENABLED)

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	
						<p>→←: Select Screen ↑↓: Select Item Enter: Select +/- : Change Opt F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit</p>
Version 2.14.1219. Copyright (C) 2011 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	Select 0-60

Field Name	Wake up second(Show when Wake system from S5 set to Fixed Time)
Default Value	0
Possible Value	0 - 59
Help	Select 0-60

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

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	CPU Speed
Default Value	Displays the 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	[Disabled]
Possible Value	Enabled Disabled
Help	When enabled, a VMM can utilize the additional hardware capabilities provided by Vander pool Technology
Field Name	PPM Configuration
Help	PPM Configuration Parameter

2.6.1 PPM Configuration

Main	Advanced	Chipset	Security	Boot	Save & Exit
PPM Configuration					Item help
CPU C state Report [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 C state Report
Default Value	[Enabled]
Possible Value	Enabled Disabled
Help	Enable/Disable CPU C state report to OS.

2.7 SATA CONFIGURATION

Main	Advanced	Chipset	Security	Boot	Save & Exit
SATA Configuration SATA Interface Speed [Gen2] SATA Port 0 Not Present SATA Port 1 Not Present					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 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.					

Field Name	SATA Interface Speed
Default Value	[Gen2]
Possible Value	Gen1 / Gen2/Gen3
Help	Select SATA Interface Speed, CHV A1 always with Gen1 Speed.

Field Name	SATA Port 0
Default Value	Not Present
Possible Value	SATA Device Model Name

Field Name	SATA Port1
Default Value	Not Present
Possible Value	SATA Device Model Name

2.8 NETWORK STACK CONFIGURATION

Main	Advanced	Chipset	Security	Boot	Save & Exit
Network stack [Enabled] Ipv4 PXE Support [Enabled] Ipv6 PXE Support [Enabled]					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	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.

2.9 CSM CONFIGURATION

Main	Advanced	Device	Chipset	Security	Boot	Save & Exit
Compatibility Support Module Configuration						Item help
CSM Support				[Enabled]		
CSM Module Version				07.76		
GateA20 Active				[Upon Request]		
Option ROM Message				[Force BIOS]		
Boot option filter				[UEFI only]		
Option ROM execution order						→←: Select Screen ↑↓: Select Item Enter: Select +/- : Change Opt F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit
Network				[UEFI]		
Storage				[UEFI]		
Video				[UEFI]		
Other PCI devices				[UEFI]		
Version 2.15.1326. Copyright (C) 2012 American Megatrends, Inc.						

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

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

Field Name	CSM16 Module Version
Default Value	07.74
Comment	This field is not selectable. There is no help text associated with it.

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

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

Field Name	Boot option filter
Default Value	[UEFI only]
Possible Value	UEFI only Legacy only
Help	This option controls Legacy/UEFI ROMs priority.

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

Field Name	Storage
Default Value	[UEFI]
Possible Value	Do not launch UEFI Legacy
Help	Controls the execution of UEFI and Legacy Storage OpROM

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

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

3. CHIPSET

Main	Advanced	Chipset	Security Boot	Save & Exit
DeepSx Power Policies			[Enable]	Item help
Restore AC Power Loss			[Late state]	
DVMT Pre-Allocated			[64MB]	→←: Select Screen ↑↓: Select Item Enter: Select +/- : Change Opt F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit
DVMT Total Gfx Mem			[256MB]	
Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.				

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

Field Name	Restore AC Power State
Default Value	[Latest State]
Possible Value	Power off Power on Last State
Help	Select AC power state when power is re-applied after a power failure.

Field Name	DVMT Pre-Allocated
Default Value	[64M]
Possible Value	64M / 96M / 128M / 256M / 384M
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.

4. SECURITY

Main	Advanced	Chipset	Security	Boot	Save & Exit				
<p>Password Description</p> <p>If Only the Administrator's password is set then this only limits access to Setup and is only asked for when entering Setup</p> <p>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.</p> <p>The password length must be in the following range:</p> <table> <tr> <td>Minimum Length</td> <td>3</td> </tr> <tr> <td>Maximum Length</td> <td>20</td> </tr> </table> <p>Administrator Password</p> <p>User Password</p> <p>HDD Security Configuration</p> <p>P0:Device Name</p> <p>▶ Secure Boot menu</p>					Minimum Length	3	Maximum Length	20	<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>
Minimum Length	3								
Maximum Length	20								
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Field Name	Administrator Password
Help	Set Administrator Password
Comment	Press Enter when selected to go into the associated Sub-Menu.

Field Name	User Password
Help	Set 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 menu
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
<p>HDD Password Description</p> <p>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.</p> <p>HDD PASSWORD CONFIGURATION:</p> <p>Security Supported : Yes</p> <p>Security Enabled : No</p> <p>Security Locked : No</p> <p>Security Frozen : No</p> <p>HDD User Pwd Status : NOT INSTALLED</p> <p>Set User Password</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	Set User Password
Help	Set HDD User Password. \n*** Advisable to Power Cycle System after Setting Hard Disk Passwords ***.\nDiscard or Save changes option in setup does not have any impact on HDD when password is set or removed. If the 'Set HDD User Password' option is grayed out, do power cycle to enable the option again
Comment	Press Enter when selected to go into the associated Sub-Menu.

4.2 SECURE BOOT MODE

Main	Advanced	Chipset	Security	Boot	Save & Exit	
System Mode					Setup	Item help
Secure Boot					Not Active	
Secure Boot					[Enabled]	→←: Select Screen ↑↓: Select Item Enter: Select +/- : Change Opt F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit
Secure Boot Mode					[Standard]	
▶ Key Management						
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Field Name	Secure Boot
Default Value	[Enabled]
Possible Value	Enabled / Disabled
Help	Secure Boot can be enabled if 1.System running in User mode with enrolled Platform Key(PK) 2.CSM function is disabled

Field Name	Secure Boot Mode
Default Value	[Standard]
Possible Value	Standard / Custom
Help	Secure Boot mode selector. 'Custom' Mode enables users to change Image Execution policy and manage Secure Boot Keys

Field Name	Key Management
Help	Enables experienced users to modify Secure Boot variables
Comment	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																								
<ul style="list-style-type: none"> ▶ Enroll All Factory Default Keys ▶ Save All Secure Boot Variables 																													
<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> </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		
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																											
					→←: 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	Provision Factory Default Key
Default Value	[Disabled]
Possible Value	Enabled Disabled
Help	Install Factory default Secure Boot Keys when System is in Setup Mode.

Field Name	Enroll All Factory Default Keys
Help	Force System to User Mode - install all Factory Default keys(PK,KEK,db,dbt,dbx). Change takes effect after reboot
Comment	

Field Name	Delete All Secure Boot Variables
Help	Force System to Setup Mode - clear all Secure Boot Variables(PK,KEK,db,dbx). Change takes effect after reboot
Comment	

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

Field Name	Platform Key (PK) : 0 0
Possible Value	Set New Key Delete key
Help	Enroll Factory Defaults or load the keys from a file with:\n 1.Public Key Certificate in:\n a)EFI_SIGNATURE_LIST\n b)EFI_CERT_X509 (DER encoded)\n c)EFI_CERT_RSA2048 (bin)\n d)EFI_CERT_SHA256 (bin)\n 2.Authenticated UEFI Variable\n \nKey source:Default,Custom,Mixed\n(*) modified from Setup menu

Field Name	Key Exchange Keys : 0 0
Possible Value	Set New Key Append Key(If Provision Factory Default Key Enable) Delete key
Help	Enroll Factory Defaults or load the keys from a file with:\n 1.Public Key Certificate in:\n a)EFI_SIGNATURE_LIST\n b)EFI_CERT_X509 (DER encoded)\n c)EFI_CERT_RSA2048 (bin)\n d)EFI_CERT_SHA256 (bin)\n 2.Authenticated UEFI Variable\n \nKey source:Default,Custom,Mixed\n(*) modified from Setup menu

Field Name	Authorized Signatures : 0 0
Possible Value	Set New Key Append Key(If Provision Factory Default Key Enable) Delete key
Help	Enroll Factory Defaults or load the keys from a file with:\n 1.Public Key Certificate in:\n a)EFI_SIGNATURE_LIST\n b)EFI_CERT_X509 (DER encoded)\n c)EFI_CERT_RSA2048 (bin)\n d)EFI_CERT_SHA256 (bin)\n 2.Authenticated UEFI Variable\n \nKey source:Default,Custom,Mixed\n(*) modified from Setup menu

Field Name	Forbidden Signatures: 0 0
Possible Value	Set New Key Append Key(If Provision Factory Default Key Enable) Delete key
Help	Enroll Factory Defaults or load the keys from a file with:\n 1.Public Key Certificate in:\n a)EFI_SIGNATURE_LIST\n b)EFI_CERT_X509 (DER encoded)\n c)EFI_CERT_RSA2048 (bin)\n d)EFI_CERT_SHA256 (bin)\n 2.Authenticated UEFI Variable\n \nKey source:Default,Custom,Mixed\n(*) modified from Setup menu

Field Name	Authorized TimeStamps : 0 0
Possible Value	Set New Key Delete key
Help	Enroll Factory Defaults or load the keys from a file with:\n 1.Public Key Certificate in:\n a)EFI_SIGNATURE_LIST\n b)EFI_CERT_X509 (DER encoded)\n c)EFI_CERT_RSA2048 (bin)\n d)EFI_CERT_SHA256 (bin)\n 2.Authenticated UEFI Variable\n \nKey source:Default,Custom,Mixed\n(*) modified from Setup menu

5. BOOT

Boot mode select = UEFI

Main	Advanced	Chipset	Boot	Security	Save & Exit	
Boot Configuration					Item	help
Setup Prompt Timeout					3	
Bootup NumLock State					[On]	
Fast Boot					[Disabled]	
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					[USB Lan]	
Boot Option #8					[Network]	
UEFI CD/DVD ROM Drive BBS Priorities						
UEFI Hard Disk Drive BBS Priorities						
UEFI NETWORK Drive BBS Priorities						
UEFI USB CD/DVD ROM Drive BBS Priorities						
UEFI USB Hard Disk Drive BBS Priorities						
UEFI USB KEY Drive BBS Priorities						
					→←: 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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Boot mode select = LEGACY

Main	Advanced	Chipset	Security	Boot	Save & Exit	
Boot Configuration					Item	help
				Setup Prompt Timeout	3	
				Bootup NumLock State	[On]	
				Fast Boot	[Enabled]	
				Boot mode select	[Legacy]	
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	[USB Lan]	
				Boot Option #8	[Network]	
				CD/DVD ROM Drive BBS Priorities		
				Hard Disk Drive BBS Priorities		
				NETWORK Drive BBS Priorities		
				USB CD/DVD ROM Drive BBS Priorities		
				USB Hard Disk Drive BBS Priorities		
				USB KEY Drive BBS Priorities		
				USB Floppy Drive BBS Priorities		
					→←: 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	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	Bootup NumLock State
Default Value	[On]
Possible Value	On Off
Help	Select the keyboard NumLock state

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

Field Name	Boot mode select
Default Value	[UEFI]
Possible Value	LEGACY (Restore non-Windows 8 Default) UEFI
Help	Select boot mode LEGACY/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	Sets 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	Sets 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	Sets 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	Sets 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	Sets 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	Sets the system boot order

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

Field Name	Boot Option #8
Default Value	[Network]
Possible Value	CD/DVD, Hard Disk, Network, USB CD/DVD, USB Hard Disk, USB KEY, USB Floppy, USB Lan
Help	Sets the system boot order

Boot mode select = LEGACY

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	Sets 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	Sets 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	Sets 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	Sets 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	Sets 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	Sets the system boot order

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

Field Name	Boot Option #8
Default Value	[Network]
Possible Value	CD/DVD, Hard Disk, Network, USB CD/DVD, USB Hard Disk, USB KEY, USB Floppy, USB Lan
Help	Sets the system boot order

Legacy mode: When restore not Win8 and Win10 64-bits defaults and reset will present

Field Name	CD/DVD ROM Drive BBS Priorities
Help	Specifies the Boot Device Priority sequence from available CDROM/DVD Drives.
Comment	Press Enter when selected to go into the associated Sub-Menu.

Field Name	Hard Disk Drive BBS Priorities
Help	Specifies the Boot Device Priority sequence from available Hard Disk Drives.
Comment	Press Enter when selected to go into the associated Sub-Menu.

Field Name	NETWORK Drive BBS Priorities
Help	Specifies the Boot Device Priority sequence from available NETWORK Drives.
Comment	Press Enter when selected to go into the associated Sub-Menu.

Field Name	USB CD/DVD ROM Drive BBS Priorities
Help	Specifies the Boot Device Priority sequence from available USB CDROM/DVD Drives.
Comment	Press Enter when selected to go into the associated Sub-Menu.

Field Name	USB Hard Disk Drive BBS Priorities
Help	Specifies the Boot Device Priority sequence from available USB Hard Disk Drives.
Comment	Press Enter when selected to go into the associated Sub-Menu.

Field Name	USB KEY Drive BBS Priorities
Help	Specifies the Boot Device Priority sequence from available USB Key Drives.
Comment	Press Enter when selected to go into the associated Sub-Menu.

Field Name	USB Floppy Drive BBS Priorities (UEFI Boot Mode Not Support)
Help	Specifies the Boot Device Priority sequence from available USB Floppy Drives.
Comment	Press Enter when selected to go into the associated Sub-Menu.

UEFI mode: When restore Win8 and Win10 64-bits defaults and reset will present

Field Name	UEFI Hard Disk Drive BBS Priorities
Help	Specifies the Boot Device Priority sequence from available UEFI Hard Disk Drives.
Comment	Press Enter when selected to go into the associated Sub-Menu.

Field Name	UEFI NETWORK Drive BBS Priorities
Help	Specifies the Boot Device Priority sequence from available UEFI NETWORK Drives.
Comment	Press Enter when selected to go into the associated Sub-Menu.

Field Name	UEFI USB CD/DVD ROM Drive BBS Priorities
Help	Specifies the Boot Device Priority sequence from available UEFI USB CDROM/DVD Drives.
Comment	Press Enter when selected to go into the associated Sub-Menu.

Field Name	UEFI USB Hard Disk Drive BBS Priorities
Help	Specifies the Boot Device Priority sequence from available UEFI USB Hard Disk Drives.
Comment	Press Enter when selected to go into the associated Sub-Menu.

Field Name	UEFI USB KEY Drive BBS Priorities
Help	Specifies the Boot Device Priority sequence from available UEFI USB Key Drives.
Comment	Press Enter when selected to go into the associated Sub-Menu.

6. SAVE & EXIT

Main	Advanced	Chipset	Security	Boot	Save & Exit
Save Options Save Changes and Exit Discard Changes and Exit Save Changes and Reset Discard Changes and Reset Restore Windows 8 and 10 64-bits Defaults Restore Linux Defaults Restore Windows 7 Defaults Restore Windows 10 32-bits Defaults Boot Override Windows Boot Manager					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	Save Options
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Field Name	Save Changes and Exit
Help	Exit system setup after saving the changes.
Comment	

Field Name	Discard Changes and Exit
Help	Exit system setup without saving the changes.
Comment	

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

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

Field Name	Restore Windows 8-64 bits Defaults
Help	Restore/Load Windows 8 and 10 64-bits Default values for all the setup options.
Comment	

Field Name	Restore Linux bits Defaults
Help	Restore/Load Windows Linux Default values for all the setup options.
Comment	

Field Name	Restore Windows 7 Defaults
Help	Restore/Load Windows 7 Default values for all the setup options.
Comment	

Field Name	Restore Windows 10 Defaults
Help	Restore/Load Windows 10-32 bits values for all the setup options.
Comment	