

AND-DNV3N1 Series

Networking Micro Box

- Intel® Denverton® SoC
- 8 or 4 GbE Copper (1-pair bypass)
- 2 SFP+



User Manual

Acrosser Technology Co., Ltd.
www.acrosser.com

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Purpose

This document is intended to provide the information about the features and use of the product.

Audience

The intended audiences are technical personnel, not for general audiences.

Ver: 100-001

Date: Sep. 1, 2020

To read this User Manual on your smart phone, you will have to install an APP that can read PDF file format first. Please find the APP you prefer from the APP Market.

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1. System Introduction

AND-DNV3N1 is an entry level networking appliance. In a small box, this appliance equip a powerful Intel Atom C3000 SoC.

This SoC supports multi-core CPU computing and support QAT, USB 3.0 and LAN controller which can be 10GbE capable.

AND-DNV3N1 is an ideal networking appliance for small office. It can support up to 10 LAN ports with both copper and fiber media. Supports two USB 3.0 ports, optional WiFi 5 and 4G wireless connection. AND-DNV3N1 consumes only a few power. In this small yet powerful box, the thermal dissipation is really well designed so no fan is needed. This fanless design not only made a quiet office be possible, but also assure the non-stop LAN connection for the business environment. For that no fan means no moving part which is the most vulnerable part in the electronic device.

1.1. Model Description

Model Name	Description
AND-DNV3N1-04F	Intel Atom C3558 (4-core) SoC, 4 GbE Copper (1-pair bypass), 2x SFP+, 2x USB 3.0, 1x 2.5"SATAIII, 1x mPCIe socket (for WLAN) and 1x M.2B (for 2x 4G LTE or 2242 SSD), and 1x 12V DC-In.
AND-DNV3N1- 4C	Intel Atom C3558 (4-core) SoC, 8 GbE Copper, 2x SFP+, 2x USB 3.0, 1x 2.5"SATAIII, 1x mPCIe socket (for WLAN) and 1x M.2B (for 2x 4G LTE or 2242 SSD), and 1x 12V DC-In.
AND-DNV3N1- 4C1	Intel Atom C3558 (4-core) SoC, 8 GbE Copper (1-pair bypass), 2x SFP+, 2x USB 3.0, 1x 2.5"SATAIII, 1x mPCIe socket (for WLAN) and 1x M.2B (for 2x 4G LTE or 2242 SSD), and 1x 12V DC-In.
AND-DNV3N1-02	Intel Atom C3308 (2-core) SoC, 4 GbE Copper (1-pair bypass), 2 USB 2.0, 1x 2.5"SATAIII, 1x M.2B (for 4G LTE), 1x DC-In.

1.2. Specifications

(Specifications are subject to change without notice.)

General

Thermal Solution	<ul style="list-style-type: none">Fanless Design		
CPU	<ul style="list-style-type: none">Intel® Denverton® C3558 4 cores, 2.2GHzIntel® Denverton® C3308 2 cores, 1.6GHz		
Memory	<ul style="list-style-type: none">1x SO-DIMM DDR4		
BIOS	<ul style="list-style-type: none">Support Console Re-directionSupport Bypass Setting		
	Status	Normal	Bypass
	SYS (ON)	V	
	SYS (OFF)		V
	WDT (Timeout)		V
	PWR (Lost)	Remained prior status	
	<ul style="list-style-type: none">Support PXE boot from all RJ-45 Coppers		

Network Interface

Ethernet (on-board)	<ul style="list-style-type: none"> For C3308: 4x Copper, Intel i211, LAN [1: 4] For C3538: 8x Copper or 4x Copper + 2x 10G Fiber Intel i211, LAN [1: 8] Copper or Intel i211, LAN [1:4] & SoC embedded SFI, SFP+[1:2]
LAN bypass (1-pair)	<ul style="list-style-type: none"> LAN bypass by LAN[1:2]

Storage

HDD Bay	<ul style="list-style-type: none"> 1x 2.5" Internal HDD Bay
M.2 NVME	<ul style="list-style-type: none"> 1x M.2B socket for 2242 SSD (for C3558)

I/O

Front Panel	<ul style="list-style-type: none"> 8x Ethernet Link/Act LED 8x Ethernet 1000M LED 2x SFP+ Link LED 2x SFP+ Act LED 1x Sys Power LED (12V) 1x Storage LED 1x LAN Bypass LED
--------------------	---

Rear Panel	<ul style="list-style-type: none"> • 1x Reset button • 2x USB 3.0 • 1x RJ45 Console port • 2x SFP+(For C3558) • 8x or 4x GbE LAN (Copper) • 5x SMA for WLAN & WWAN (IEEE 802.11 a/b/g/n/ac & 4G LTE) • 1x DC-in connector (12V)
Internal I/O	<ul style="list-style-type: none"> • 1x mini-PCIe connector (for Wi-Fi IEEE 802.11 a/b/g/n/ac 3T3R module) • 1x M.2B connector (w USB 2.0+3.0 signal & SATA3, for 4G module or 2242 SSD) with 2 SIM socket • 1x SATA3+power connectors • GPIO pin header

Other Features

Watchdog Timer	<ul style="list-style-type: none"> • Software programmable 0~255 Seconds, 0=disable timer.
Battery	<ul style="list-style-type: none"> • Lithium Battery, 3V 220mAH (CR2032), for RTC
Hardware Monitoring	<ul style="list-style-type: none"> • CPU Voltage • CPU Temperature • System Temperature
Security & Mgmt.	<ul style="list-style-type: none"> • On-board TPM 2.0 (Not for AND-DNV3N1-4C, AND-DNV3N1-4C1)

Power Requirement

Power Adapter	<ul style="list-style-type: none"> • 12VDC, 40W Adapter
----------------------	--

Software

OS Support	<ul style="list-style-type: none"> • Linux Kernel 4.4 & above, (64-bit)
-------------------	--

Mechanical & Environment

Dimension	<ul style="list-style-type: none"> • 250(L) x 165(W) x 44(H) mm
Operating Temperature	<ul style="list-style-type: none"> • 0 ~ 40°C (32 ~ 104°F)
Storage Temperature	<ul style="list-style-type: none"> • -20 ~ 80°C (-4 ~ 176°F)
Relative Humidity	<ul style="list-style-type: none"> • 0 to 90% @40°C, non-condensing

EMC & Safety

Certification	• CE, FCC Class A, RoHS 2, cULus
Vibration Test	• IEC 60068-2-64, 5~500Hz, 3GRMS
Drop Test	• ISTA-2A 2006

1.3. Package Contents

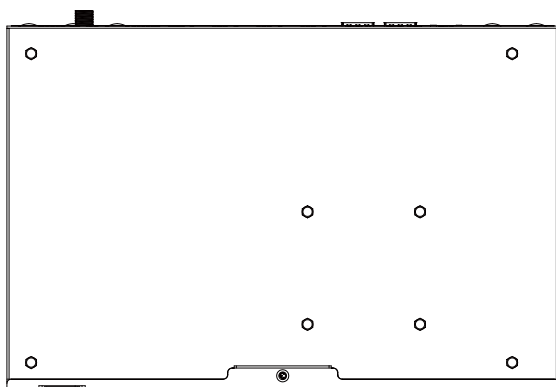
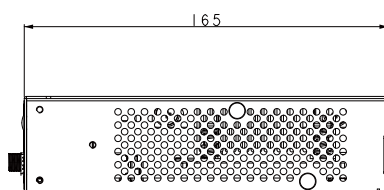
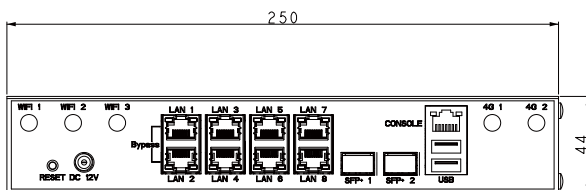
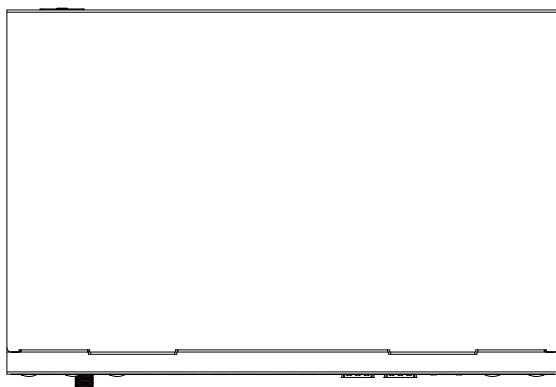
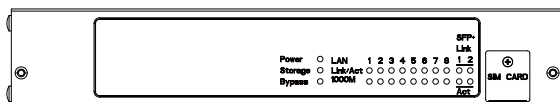
Check if the following items are included in the package.

	Item	Q'ty
<input type="checkbox"/>	AND-DNV3N1 System	1
<input type="checkbox"/>	Power Adapter (12V)	1
<input type="checkbox"/>	Power Cord	1
<input type="checkbox"/>	Screw Pack	1

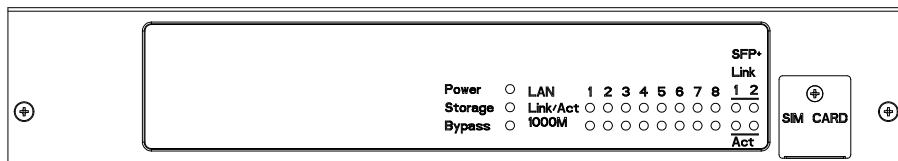
1.4. System Dissection

1.4.1. Dimensions

(Unit: mm)



1.4.2. Front I/O Panel



- Power**

System Power LED

- Storage**

Storage Active LED

- Bypass**

LAN Bypass LED

- LAN 1~8**

IEEE802.3 Status LED

LED	Light	Display
G	Green	Link with Activity
Y	Yellow	1000Mbps

- SFP+ 1~2**

SFP+ 1~2 Link/Active LED

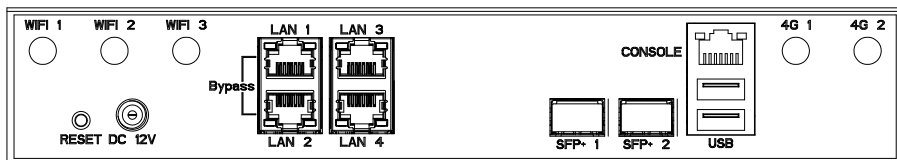
LED	Light	Display
G	Green	LINK LED
Y	Yellow	ACTIVE LED

- SIM CARD**

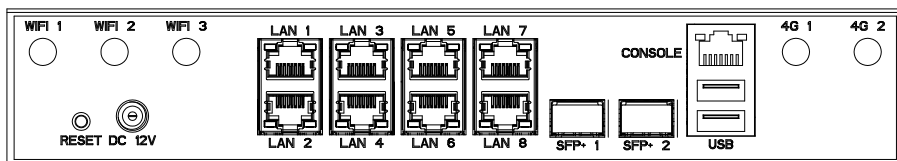
Standard SIM Card Socket

1.4.3. Rear I/O Panel

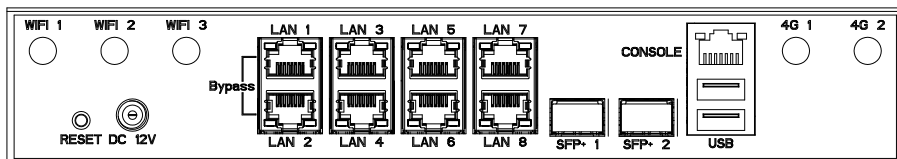
AND-DNV3N1-04F



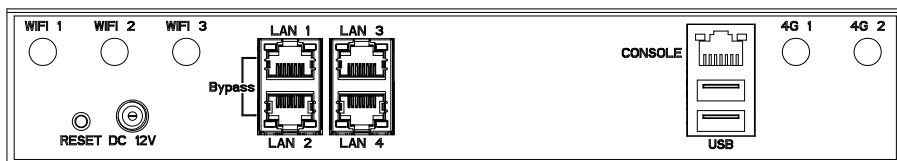
AND-DNV3N1-4C



AND-DNV3N1-4C1



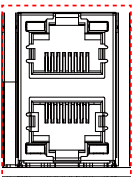
AND-DNV3N1-02



- **WIFI 1~3, 4G 1~2**
SMA Antenna Hole. Reserved for optional Wi-Fi / BT, 4G LTE antenna.
- **RESET**
Reset Button
- **DC 12V**
DC12V Power Input

- **LAN1 ~ LAN8**

Standard IEEE802.3 & RJ45 connector

	LED	Light	Status
	Left	Green (Blink)	Link with Activity
	Right	Off	10Mbps
		Yellow	100Mbps
		Green	1000Mbps

- **SFP1 ~ SFP2**

Standard SFP+ Connector for 10G LAN

- **Console**

Console Port (RJ45)

Pin #	Signal	Pin #	Signal
1	RTS	5	GND
2	DTR	6	RxD
3	TxD	7	DSR
4	GND	8	CTS

- **USB**

Standard USB Port

2. Components Assembly

Please follow the instruction to install the inner modules.

2.1. SIM Card Installation

Step 1: Remove the screw on the SIM Card cover plate.



Step 2: Take down the SIM Card cover plate.



Step 3: Insert the SIM card.



- Step 4: Push the SIM card into the socket until it docks in locked position.



- Step 5: Put the the SIM Card cover plate back.



- Step 6: Lock the SIM Card cover plate with screw.



2.2. Open up Top Cover

Step 1: Remove the screw that lock the bottom cover.



Step 2: Remove the screws that lock at the front side.



Step 3: Push forward the top cover to open it.



Step 4: Opem up the top cover.



2.3. Memory Module Installation

Step 1: Insert the memory module into the slot.



Step 2: Push the module down into the slot until it docks in locked position.

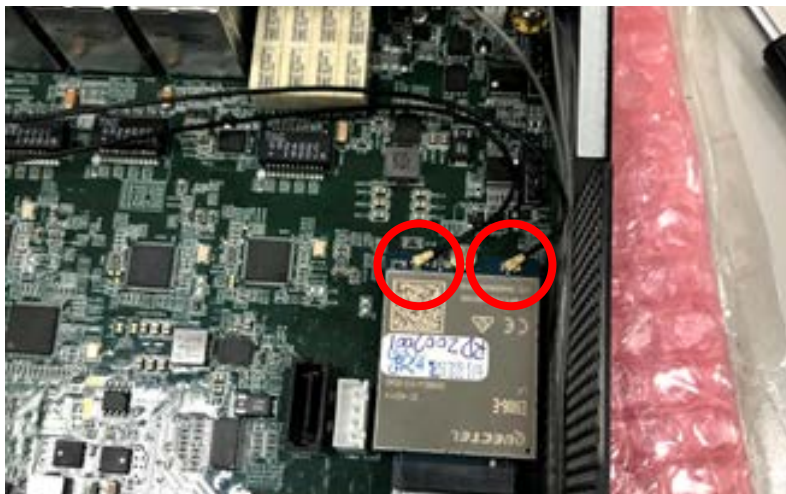


2.4. 4G & WiFi Module Installation

Step 1: Insert the 4G module into socket and lock with screw.



Step 2: Connect with RF Cables.



Step 3: Insert the WiFi module into socket and lock with screw.



Step 4: Connect with RF Cables.



Step 5: Insert antennas according to the panel allocation.
 4G 1, 4G 2 attach with 4G LTE antenna.
 WiFi 1, WiFi 2, and WiFi 3 attach with WiFi antenna.



2.5. Hard Disk & Top Cover Installation

Step 1: Install hard disk with screws through the cushion pad onto the disk bracket.



Step 2: Connect with SATA and POWER cables.



Step 3: Take care the cables not to tangle with the heatsink.



- Step 4: Close the top cover.
Push the top cover inward until it docks into the slot.



- Step 5: Lock the chassis with screws.



3. BIOS Settings

This chapter describes the BIOS menu displays and explains how to perform common tasks needed to get the system up and running. It also gives detailed explanation of the elements found in each of the BIOS menus. The following topics are covered:

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

Once you enter the Award BIOS™ CMOS Setup Utility, the Main Menu will appear on the screen. Use the arrow keys to highlight the item and then use the <Pg Up> <Pg Dn> keys to select the value you want in each item.

3.1. Main Setup

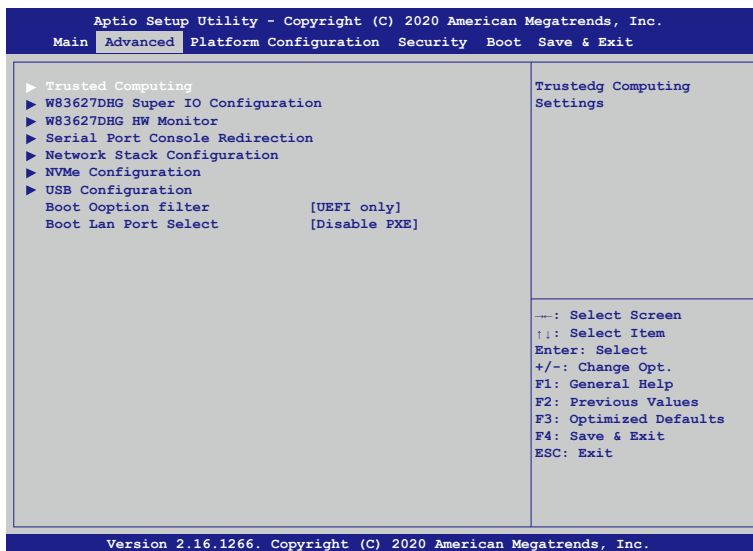
The BIOS setup main menu includes some options. Use the [Up/Down] arrow key to highlight the option, and then press the [Enter] key to select the item and configure the functions.

Aptio Setup Utility - Copyright (C) 2020 American Megatrends, Inc.		
Main Advanced Platform Configuration Security Boot Save & Exit		
BIOS Information BIOS Vendor American Megatrends Core Version 5.13 Compliancy UEFI 2.6; PI 1.4 Project Name DNV3N1-4Core Release Version 011-003 Build Date and Time 08/14/2020 11:22:33		Set the Date. Use Tab to switch between Date elements. Default Ranges: Year: 2005-2009 Months: 1-12 Days: dependent on month
Memory Information Total Memory 16384 MB (DDR4) ME FW Version 4.0.4.181		
System Date [Wed 08/19/2020] System Time [11:22:33]		--: Select Screen ++: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
Version 2.19.1266. Copyright (C) 2020 American Megatrends, Inc.		

Note: Listed at the bottom of the menu are the control keys. If you need any help with the item fields, you can press <F1> key, and it will display the relevant information.

- **System Date**
Set the system date.
- **System Time**
Set the system time.

3.2. Advanced Setup



- **Trusted Computing**
Set trusted computing settings.
- **W83627DHG Super IO Configuration**
Set system super IO chip parameters.
- **W83627DHG HW Monitor**
Monitor hardware status.
- **Serial Port Console Redirection**
Console port setting.
- **Network Stack Configuration**
Network stack setting.
- **NVMe Configuration**
Set NVMe device options configuration.
- **USB Configuration**
Set USB configuration parameters.
- **Boot Option filter**
This option controls Legacy/UEFI ROMs priority.

- **Boot Lan Port Select**
Select LAN port to boot.

3.2.1. Trusted Computing

Aptio Setup Utility - Copyright (C) 2020 American Megatrends, Inc.	
Advanced	
TPM20 Device Found Vendeor: IFX Firmware Version: 5.61 Security Device Support [Enable] Active PCR banks SHA-1,SHA256 Available PCR banks SHA-1,SHA256 TPM 2.0 Clear Operation [None] TPM 20 Interface Type [TIS] Device Select [Auto]	Enables or Disables BIOS support for security device. O.S. will not show Security device. TCG EFI protocol and INT1A interface will not be available. ---: Select Screen ↑↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
Version 2.16.1266. Copyright (C) 2020 American Megatrends, Inc.	

3.2.2. W83627DHG Super IO Configuration

Aptio Setup Utility - Copyright (C) 2020 American Megatrends, Inc.	
Advanced	
W83627DHG Super IO Configuration Super IO Chip W83627DHG Serial Port 1 Configuration	Set Parameters of Serial Port 1 (COMA) ---: Select Screen ↑↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
Version 2.16.1266. Copyright (C) 2020 American Megatrends, Inc.	

3.2.3. W83627DHG HW Monitor

Aptio Setup Utility - Copyright (C) 2020 American Megatrends, Inc.	
Advanced	
Pc Health Status Smart Fan Function [Enabled] CPU temperature : +43'C System temperature : +49'C Fan Speed : 6000 RPM CPU Voltage : +1.008 V	Enable or Disable Smart Fan --: Select Screen ++: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
Version 2.16.1266. Copyright (C) 2020 American Megatrends, Inc.	

3.2.4. Serial Port Console Redirection

Aptio Setup Utility - Copyright (C) 2020 American Megatrends, Inc.	
Advanced	
COM0 Console Redirections [Enable] ► Console Redirection Settings	Console Redirection Enable or Disable. --: Select Screen ++: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
Version 2.16.1266. Copyright (C) 2020 American Megatrends, Inc.	

Note: Both the console function of RJ45 and micro USB will be disabled if the Console Redirection is set disabled.

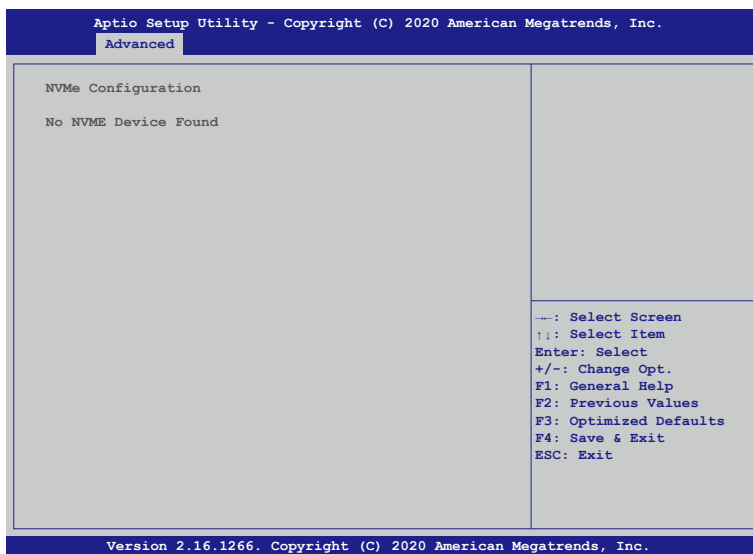
3.2.4.1. Console Redirection Settings

Aptio Setup Utility - Copyright (C) 2020 American Megatrends, Inc.		
Advanced		
COM0 Console Redirection Settings		Emulation: ANSI: Extended ASCII char set. VT100: ASCII char set. VT100+: Extends VT100 to support color, function keys, etc. VT-UTFB: Uses UTF8 encoding to map unicode.
Terminal Type	[ANSI]	--: Select Screen ↑↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
Bits per second	[115200]	
Data bits	[8]	
Parity	[None]	
Stop Bits	[1]	
Flow Control	[None]	
VT-UTF8 Combo Key Support	[Enable]	
Recorder Mode	[Disable]	
Resolution 100*31	[Disable]	
Putty KeyPad	[VT100]	
Version 2.16.1266. Copyright (C) 2020 American Megatrends, Inc.		

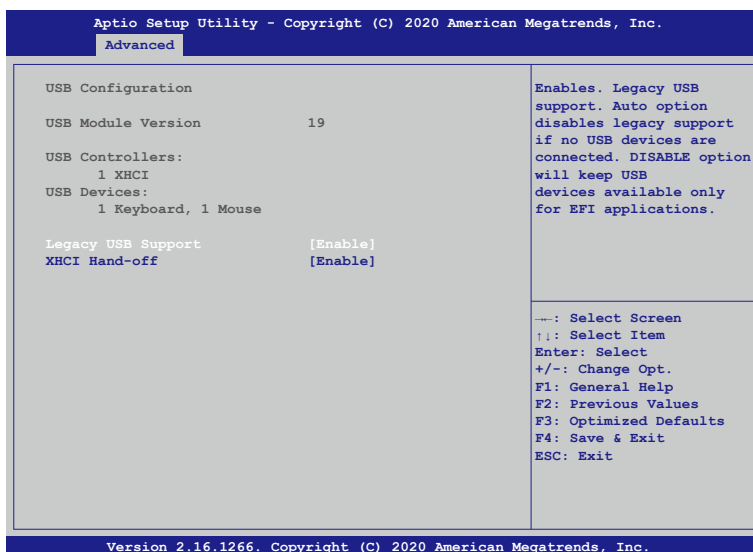
3.2.5. Network Stack Configuration

Aptio Setup Utility - Copyright (C) 2020 American Megatrends, Inc.		
Advanced		
Network Stack	[Disabled]	Enable/Disable UEFI Network Stack.
		--: Select Screen ↑↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
Version 2.16.1266. Copyright (C) 2020 American Megatrends, Inc.		

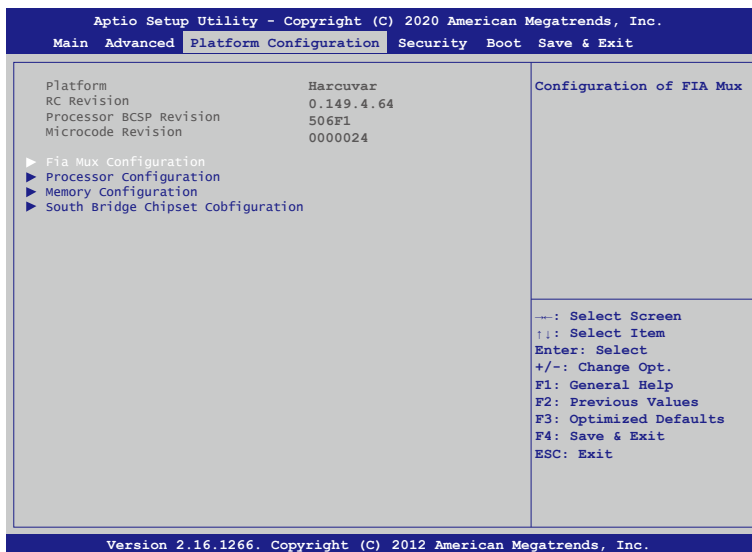
3.2.6. NVMe Configuration



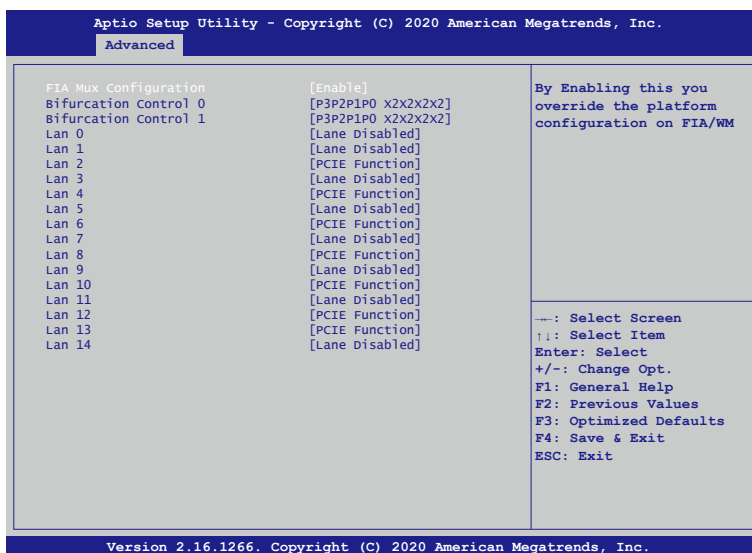
3.2.7. USB Configuration



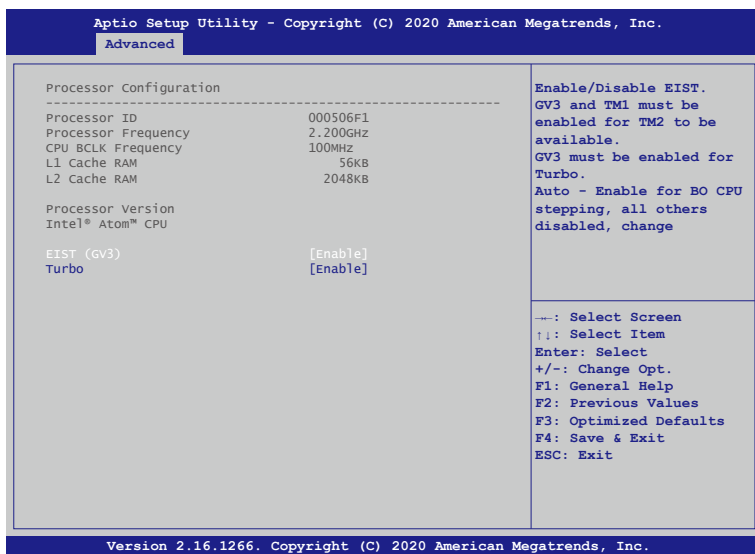
3.3. Platform Configuration



3.3.1. Fia Mux Configuration

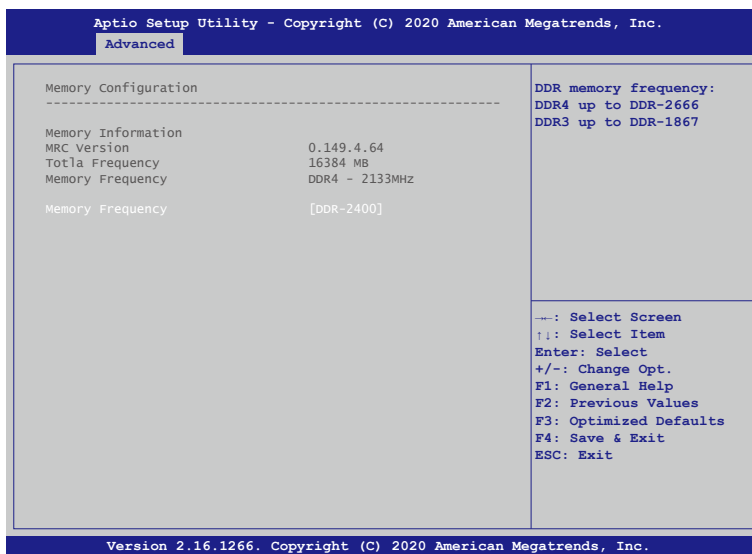


3.3.2. Processor Configuration



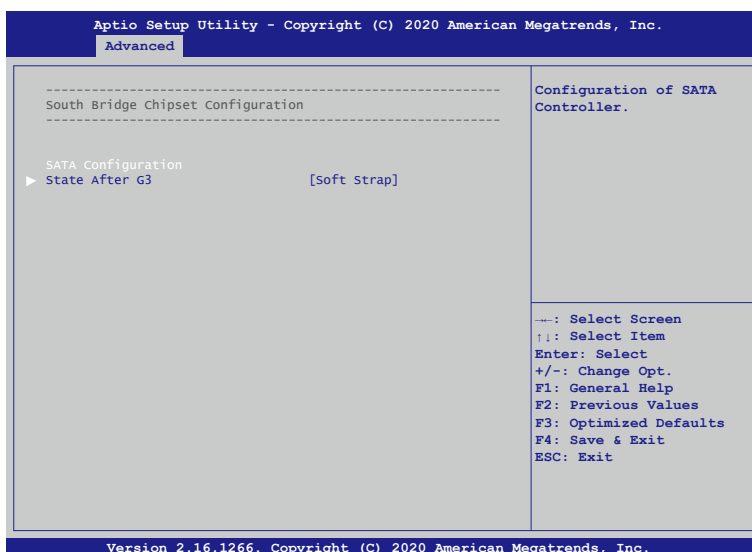
- **EIST (GV3)**
Enable/Disable EIST.
- **Turbo**
Enable/Disable CPU Turbo capability.

3.3.3. Memory Configuration



- **Memory Frequency**
DDR memory frequency.

3.3.4. South Bridge Chipset Configuration



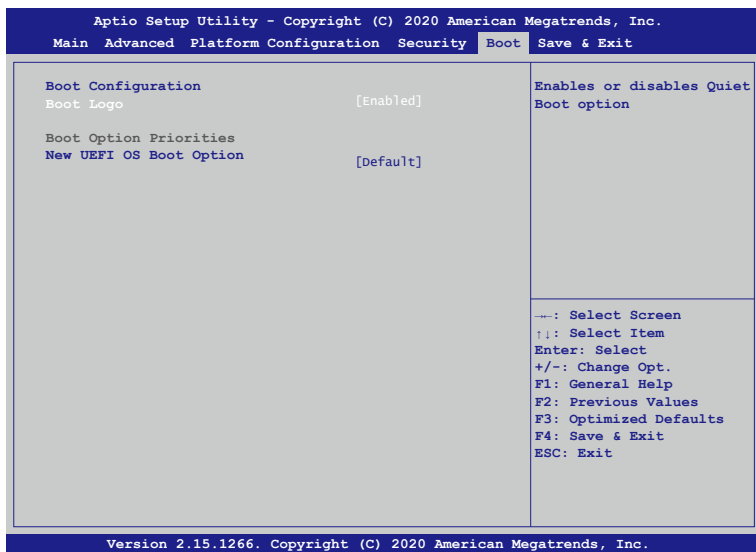
- **SATA Configuration**
Configuration of SATA controller.
- **State After G3**
Specify what state to go to when power is re-applied after a power failure (G3 state).

3.4. Security Setup

Aptio Setup Utility - Copyright (C) 2020 American Megatrends, Inc.					
Main Advanced Platform Configuration 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>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>	Minimum length	3	Maximum length	20	<p>Set Administrator Password</p>
Minimum length	3				
Maximum length	20				
	<p>---: Select Screen ↑↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit</p>				
Version 2.16.1266. Copyright (C) 2020 American Megatrends, Inc.					

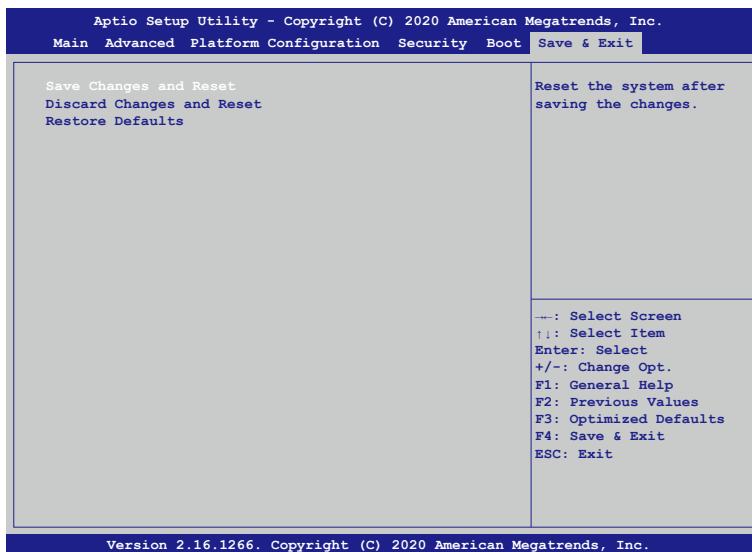
- **Administrator Password**
Set Administrator Password.

3.5. Boot Setup



- **Boot Logo**
Enables or disables Quiet Boot option.
- **Boot Option Priorities**
Set the system boot order.
- **New UEFI OS Boot Option**
Controls the placement of newly detected UEFI boot options.

3.6. Save & Exit Setup



- **Save Changes and Reset**
Reset system setup after saving the changes.
- **Discard Changes and Reset**
Reset system setup without saving any changes.
- **Restore Defaults**
Restore/Load the default values for all the set up options.

4. Software Installation and Programming Guide

4.1. Introduction

4.1.1. Environment

This test utility develop is based on kernel 4.8 above (Ubuntu 18.04.1 Server 64bit).

4.1.2. GPIO

The AND-DNV3N1 series provides GPIO interface. Users can use the GPIO APIs to control GPO Pin.

4.1.3. Watchdog

The AND-DNV3N1 series provides a Watchdog Timer. Users can use the Watchdog APIs to configure and to access the Watchdog timer. The Watchdog timer can be set to 1~255 seconds. Setting the timer to zero disables the timer. The remaining seconds of the timer to reboot can be read from the timer.

4.1.4. LAN Bypass Subsystem

Two pairs of LAN ports on AND-DNV3N1 series implements the bypass function. Users can invoke the LAN Bypass APIs to control the bypass states of the LAN ports.

1. Get bypass firmware version.
2. Set bypass wdt.
3. Set bypass wdt action.
4. Get bypass wdt action.
5. Set bypass power on action.
6. Get bypass power on action.
7. Set bypass power off action.
8. Get bypass power off action.
9. Set bypass current action.
10. Get bypass current action.

4.2. File Descriptions

4.2.1. GPIO/Watchdog/LAN Bypass Subsystem Module

1. TestUtility.exe

The GPIO, Watchdog, Lan Bypass Subsystem bin binary.

2. Libw83627.h

This file includes the declarations of the APIs and macro definitions.

3. Libw83627.a

The static library for linux.

4. Libw83627.so

The dynamic library for linux.

5. Install_driver

This file is linux shell script file. Run this file can help you install environment and modprobe driver on linux.

6. readme

Use this utility first. Please read the readme file first.

4.3. API List and Descriptions

4.3.1. GPIO

Syntax:	Get_gpi_status(int pin)
Description:	Get the status of GPIO input pins status.
Parameters:	This function fills in an integer variable as the parameter. The pin0 ~ pin1 is the status of the input pins.
Return Value:	1: HIGH, 0: LOW.

Syntax:	Get_gpo_status(int pin)
Description:	Get the status of GPIO output pins status.
Parameters:	This function fills in an integer variable as the parameter. The pin0 ~ pin1 is the status of the output pins.
Return Value:	1: HIGH, 0: LOW.

Syntax:	Set_gpo(int pin, int value)
Description:	Set the status of GPIO output value.
Parameters:	Set value 0 is Low, 1 is High
Return Value:	If the function sets the values successfully, it returns 0 or -1, any other returned value stands for error.

4.3.2. Watchdog

Syntax:	Void wdt_start(int _timevalue)
Description:	This function gets the watchdog timer register to the timevalue and starts to count down.
Parameters:	The parameter 'val' is the value to set to watchdog timer register. The range is 1 ~ 255.
Return Value:	This function returns the value of the time counter and returns it to the caller as an unsigned integer.

Syntax:	Void wdt_stop(void)
Description:	This function sets the watchdog timer stop.
Parameters:	None.
Return Value:	None.

4.3.3. LAN Bypass Subsystem

Syntax:	int get_bypass_firmware_ver(char *ver)
Description:	This function can get bypass firmware version and data to save in char pointer.
Parameters:	char pointer, this pointer to 16 character array.
Return Value:	0: Successful, -1: fail.

Syntax:	int set_bypass_wdt(int pair, int time)
Description:	This function can set which pair bypass Wdt timer.
Parameters:	pair: 1-4 , time: 1-255(sec), 0:stop.
Return Value:	0: Successful, -1: fail.

Syntax:	int set_bypass_wdt_action(int pair, int action)
Description:	This function can set which pair bypass Wdt time up action.
Parameters:	pair: 1-4 , action: 0:bypass, 1:normal
Return Value:	0: bybpass, 1: normal, -1: fail.
<hr/>	
Syntax:	int get_bypass_wdt_action(int pair)
Description:	This function can get which pair bypass Wdt time up action.
Parameters:	pair: 1-4
Return Value:	0: bybpass, 1: normal, -1: fail.
<hr/>	
Syntax:	int set_bypass_poweron_action(int pair, int action)
Description:	This function can set which pair bypass power on action.
Parameters:	pair: 1-4, action: 0: bypass, 1: normal.
Return Value:	0: Successful, -1: fail.
<hr/>	
Syntax:	int get_bypass_poweron_action(int pair)
Description:	This function can get which pair bypass power on action.
Parameters:	pair: 1-4.
Return Value:	0: bybpass, 1: normal, -1: fail.
<hr/>	
Syntax:	int set_bypass_poweroff_action(int pair, int action)
Description:	This function can set which pair bypass power off action.
Parameters:	pair: 1-4, action: 0: bypass, 1: normal.
Return Value:	0: Successful, -1: fail.
<hr/>	
Syntax:	int get_bypass_poweroff_action(int pair)
Description:	This function can get which pair bypass power off action.
Parameters:	pair: 1-4.
Return Value:	0: bybpass, 1: normal, -1: fail.

Syntax:	int set_bypass_current_action(int pair, int action)
Description:	This function can set which pair bypass current action.
Parameters:	pair: 1-4, action: 0: bypass, 1: normal.
Return Value:	0: bybpass, -1: fail.

Syntax:	int get_bypass_current_action(int pair)
Description:	This function can get which pair bypass current action.
Parameters:	pair: 1-4.
Return Value:	0: bybpass, 1: normal, -1: fail.

4.3.4. Notes

Syntax:	int libw83627_init(void)
Description:	use the watchdog, gpio function before, must be call this function first.
Parameters:	None.
Return Value:	0: Successful, -1: Fail

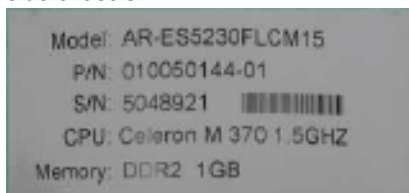
Syntax:	void lib_close(void)
Description:	if watchdog, gpio fuction not use on your program, please call this function.
Parameters:	None.
Return Value:	None.

Note: If you want to control the LAN module bypass on the LAN card purchased from Accrosser, be sure to take "7" Module H as the module reference for programming.

5. FAQ

Q 1. Where is the serial number located on my system?

- The serial number (S/N) is an alpha-numeric character located on the bottom or side chassis.



(for reference only)

Q 2. How to active the second SIM card SIERRA EM7455/EM7430 ?

- Make sure the second SIM card (UIM2) is enabled by check AT!CUSTOM?

UIM2ENABLE	0-1	Disable/Enable UIM2 slot support 0 - Not enabled (default) 1 - Enabled
------------	-----	--

- Make sure SIM hot swap for both SIMs (UIM1 & UIM2).

SIMHOTSWAPDIS	0-3	Configure SIM hotswap feature on UIM1 and/or UIM2 0 - enable UIM1 and UIM2 1 - disable UIM1 while enable UIM2 2 - disable UIM2 while enable UIM1 3 - disable UIM1 and UIM2
---------------	-----	---

- Use AT!UIMS to select active SIM between the two SIM cards.

Argument	Range	Description
<uim_slot>	0-1	Selection of active SIM Card: 0 - UICC1: External UIM Interface 1 1 - UICC2: External UIM Interface 2

Q 3. How to active the second SIM card Quectel EM06-A/EM06-E 4G ?

- AT+QDSIM=?
+QDSIM: (0,1) //List the number of currently supported card slots
OK
- AT+QDSIM?
+QDSIM: 0 //The current card slot is 1
OK
- AT+QDSIM=1 //Switch to card slot 2
OK

//reboot module

- [AT+QDSIM?](#)
+QDSIM: 1 //Enable SIM error reports
OK
- The configuration will be automatically saved to NVRAM.
- This function takes effect after restart.

Technical Support Form

We deeply appreciate your purchase of Acrosser products. Please find the “**tech_form.doc**” file in our utility CD. If you have any questions or problems about Acrosser products, please fill in the following information. We will answer your questions in the shortest time possible.

Describe Your Info and Acrosser System Info

- Your Company Name: _____
- Your Contact Info: _____ Phone Number: _____
- Your E-Mail Address: _____
- Your Company Address: _____

- Acrosser Model Name: _____
- Acrosser Serial Number: _____

Describe System Configuration

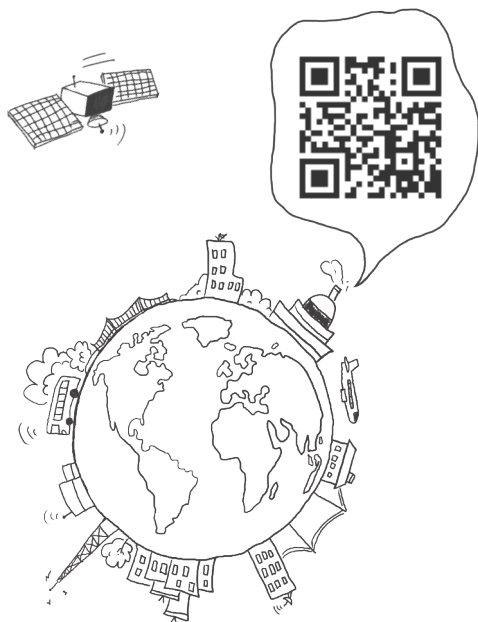
- CPU Type: _____
- Memory Size: _____
- Storage Device (e.g. HDD, CF, or SSD): _____
- Additional Peripherals (e.g. Graphic Card): _____
- Operating System & Version (e.g. Windows 7 Embedded): _____
- Special API or Driver: _____
(If yes, please provide it for debug.)
- Running Applications: _____
- Others: _____

Describe Your Problems or Questions:

Send the above information to one of the following Acrosser contacts:

- Acrosser Local Sales Representative
- Acrosser Authorized Sales Channels
- Acrosser Inquiry --- <http://www.acrosser.com/inquiry.html>
- Acrosser FAX Number --- 886-2-29992887

To Make Your **Embedded** Idea a Reality



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