

TEGUAR[®]

TRT-3493-12
User Guide

Rugged Tablet

Revision History

Current Rev: 5.2

Date: 03.16.2022

| Revision | |
|----------|--|
| 1.0 | New Release |
| 2.0 | 1.) New added 1pc Tablet Main Battery shipping along with Docking Station 2.) Win10 OS revision 3.) LTE category update 4.) Barcode Scanner SwiftDecoder supplement 5.) Battery Hot-swappable features supplement 6.) MIL-STD-810G Test Compliance update |
| 3.0 | 1.) Update main battery description |
| 4.0 | 1.) new added battery charger |
| 5.0 | 1.) Revised CPU module no. from N4200E to N4200 (Intel change model no.) 2.) Update BT version to 5.0 3.) Update GPS as optional part. 4.) Update description for page.3 feature Summary, page.20 on AC Adapter & page.21 on battery pack |
| 5.1 | 1.) Update on pg.3 for rugged tablet feature & pg.6 for feature summary |
| 5.2 | 1.) Update on pg.24 with French on caution texts concerning lithium batteries, update on RF Exposure Information (SAR), and caution information |

Rugged Tablet Features

This chapter briefly describes the features of Rugged Tablet-TRT-3493-12 which has three products respectively as well as purchased individually as optional peripherals.

- TRT-3493-12 Tablet (system)
- TRT-3493-12 Docking Station (optional peripheral) (including one standalone Tablet Battery)
- TRT-3493-12 Extension Cover (optional peripheral)
- TRT-3493-12 Battery Charger (optional peripheral)

Summarize the major features below.

Feature Summary

TABLE: TEGUAR TRT-3493-12 FEATURES

| TRT-3493-12 System- Tablet | |
|----------------------------|--|
| DISPLAY | |
| Size | 11.6" TFT-LCD |
| Max. Resolution | 1920 x 1080 |
| Luminance (cd/m2) | 300 nits Optional: 500 nits |
| Glass Type | Gorilla® Glass 3 and Direct Bonding |
| TOUCH SCREEN | |
| Type | P-CAP |
| Touch | 10 point capacitive multi-touchscreen supporting glove mode and rain mode |
| SYSTEM | |
| Operating System | Windows 10 IoT Enterprise 2019 LTSC |
| Processor | Intel® Apollo Lake Pentium N4200 (Quad-Cores) 1.1GHz with turbo frequency to 2.5GHz, 2MB L2 Cache (4 Threads) |
| Chipset | Intel® SoC Integrated |
| System RAM | LPDDR4 3733MHz 4GB (Option: 8GB) |
| System ROM | M.2 SSD 64GB (Option: 256GB) |
| Wireless | IEEE 802.11 ac/a/b/g/n (2.4GHz/5GHz) |
| Bluetooth | BT V5.0 |
| LTE/GPS (optional) | GPS (UBX-G8020-KT) LTE CAT6 w/ M.2 Slot Comp. w/ regular M.2 card (Support by Request) |
| NFC | NFC Reader (NXP NPC300) |
| Barcode Scanner | Optional: SW Decode: Honeywell SwiftDecoder (1D/2D Support)*SDK Solution only. (SDK + Integration Guide). Further integration with customer's proprietary application would be mandatory. |
| Rear Camera | 8MP Auto-Focus CMOS built-in module with Flash LED |
| Switch Key | 1 x Dump Switch ; 1 x Reset Switch |
| Sensor | Ambient Light Sensor, Gyro Sensor & G-Sensor |
| Speaker | 2 x 0.8W |

| | |
|------------------------------|--|
| Microphone | Yes |
| LED Indicator | Charging LED Power LED |
| Main Battery | 19.532Whr Removable lithium battery with latch lock (2570mAh, 7.6V)* |
| Hot-Swappable Battery | Yes, 2.66Whr back-up battery (700mAh*1, 3.8V, 1S1P) |
| I/O Port | 1 x USB 3.0 Type-A ; 1 x Nano-SIM (Support by Request w/LTE feature) 1 x Audio Jack ; 1 x DC Jack ; 1 x POGO Connector |
| Keypad | 1 x Power Key 2 x Volume Key 3 x Capacitive Function Key (on front side) |
| Fully Rugged Feature | IP65 MIL-STD-810G: - 1.2M Drop - Shock & Vibration - Sand & Dust-Blowing Sand - High/Low Temperature – Operation - High/Low temperature – Storage - Freeze/thaw –Rapid temperature change - Thermal Shock 299 x 199 x 17.7 mm |
| Dimension | 299 x 199 x 17.7 mm (without bumpers & hand-strap) 307.9 x 207.9 x 29.3 mm (with bumpers & hand-strap) |
| Weight | 895g (Entry WiFi SKU) |
| Operating Temperature | -10°C ~ 50°C |
| Storage Temperature | -20°C ~ 60°C |
| Storage Humidity | 10% ~ 90% @40°C non-condensing |
| Security | HW TPM 2.0 FIPS 140-2 Level 2 Compliance |
| Certification | CE/FCC/VCCI |
| Hand-strap | Yes |
| Shoulder-strap | Yes |
| Power Adapter | AC to DC, DC 19V 65W Adaptor |

*With JEITA2.0 Test Report 4.2hrs

TRT-3493-12 optional peripheral- Docking Station

DOCKING STATION

| | |
|----------------------------|---|
| Key Features | Desktop Cradle with Power Charging. Battery Charging Bay and I/O Expansion |
| I/O | 1 x Powered 24V USB 1 x USB 3.0 Type-A 2 x USB 2.0 Type-A 1 x HDMI 1.3 1 x Powered 5V/12V Serial Port 1 x Giga LAN 1 x Battery Charging Slot 1 x DC Jack |
| Power Adapter | AC to DC, DC 24V 180W Adapter |
| Tablet Main Battery | 1 x Standalone Tablet Main Battery (shipping along with Docking Station) |

TRT-3493-12 optional peripheral- Extension Cover

EXTENSION COVER

| | |
|----------------------|---|
| Key Features | Vehicle Mounting VESA mount support 75 mm x 75mm Power Charging and I/O Expansion Clip-Fix Design for Pick-up Tablet by Tool-Less |
| I/O | 1 x Powered 24V USB 1 x USB 3.0 Type-A 1 x HDMI 1.3 1 x Powered 5V/12V Serial Port 1 x Giga LAN (Optional) 3 x SMA (2 x LTE and 1 x GPS) for RF Antenna Path (Optional) 1 x Nano-SIM (support by request) 1 x DC Jack |
| Power Adapter | AC to DC, DC 24V 180W Adapter |

TRT-3493-12 optional peripheral- Battery Charger

EXTENSION COVER

| | |
|----------------------|--|
| Battery Slot | 2 x slots 3 x LED |
| LED indicator | - w/o battery insert: Green (blink) - w/ battery insert, Charging On-going : Green - w/ battery insert, Charging Complete : no light |
| I/O | 1 x DC Jack (adapter : use tablet adapter) |
| Power Adapter | DC 19V 65W Adaptor (sames as tablet; no included in package) |
| SKU | SKU 1 : with 1 battery pack SKU 2 : with 2 battery packs |

TRT-3493-12 Dimensions and I/O Placement

Figure shows the dimension and I/O placement of Tablet, Docking Station and Extension Cover.

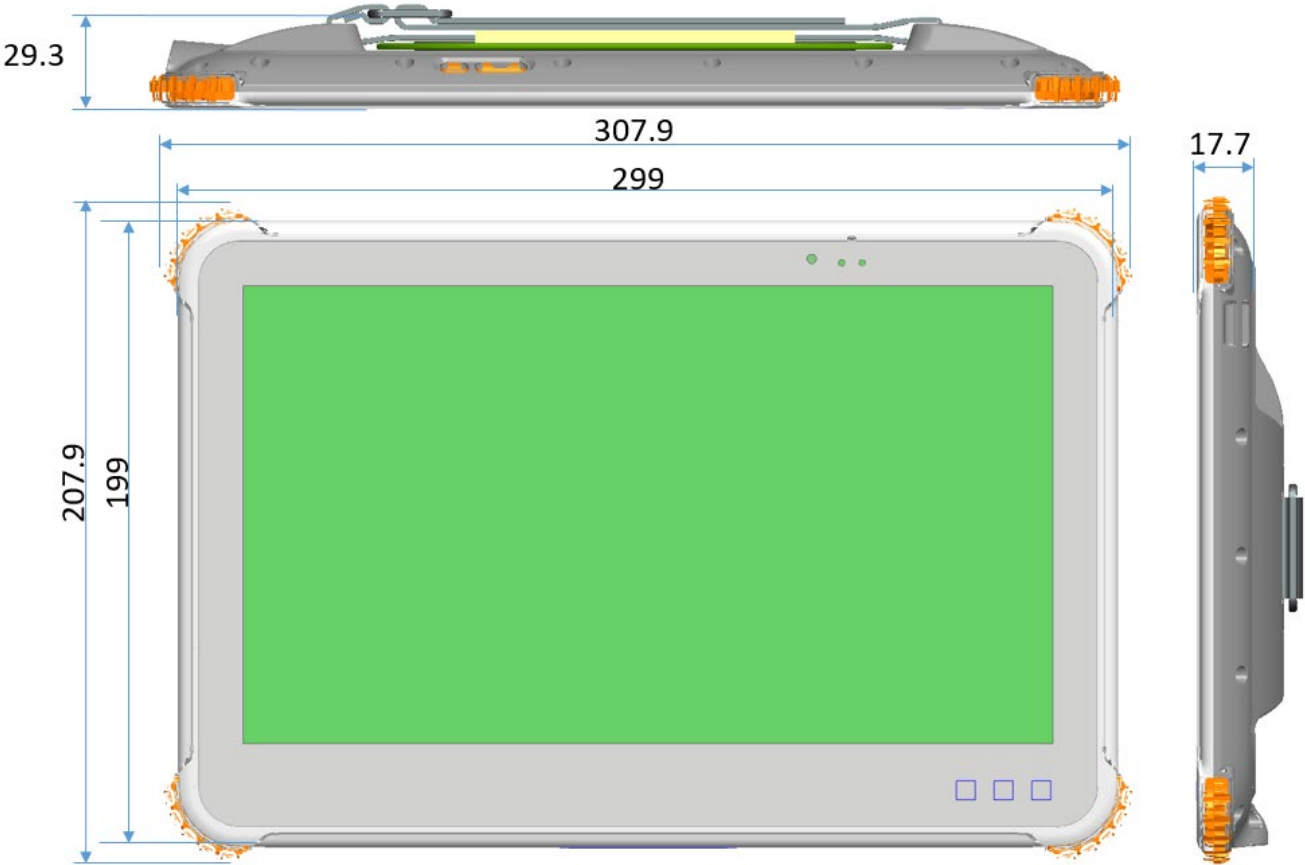


Figure1:Teguar TRT-3493-12 Tablet Dimension

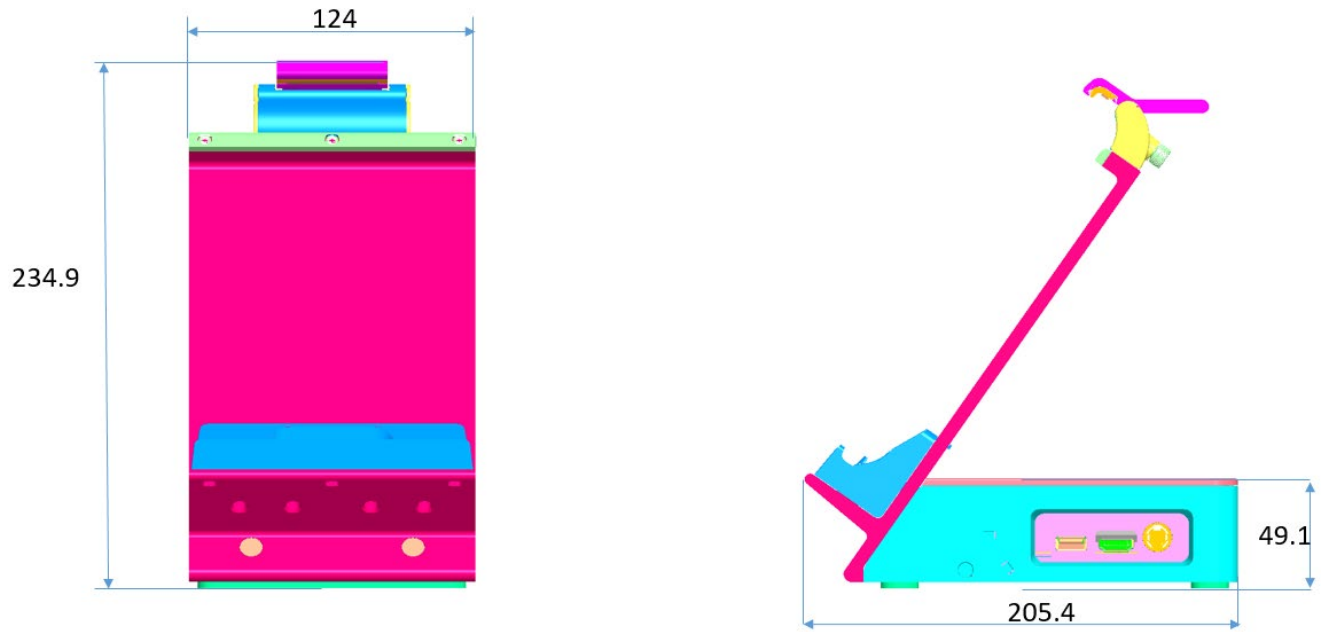


Figure2: Tegar TRT-3493-12 Docking Station Dimension (without Cable Cover)

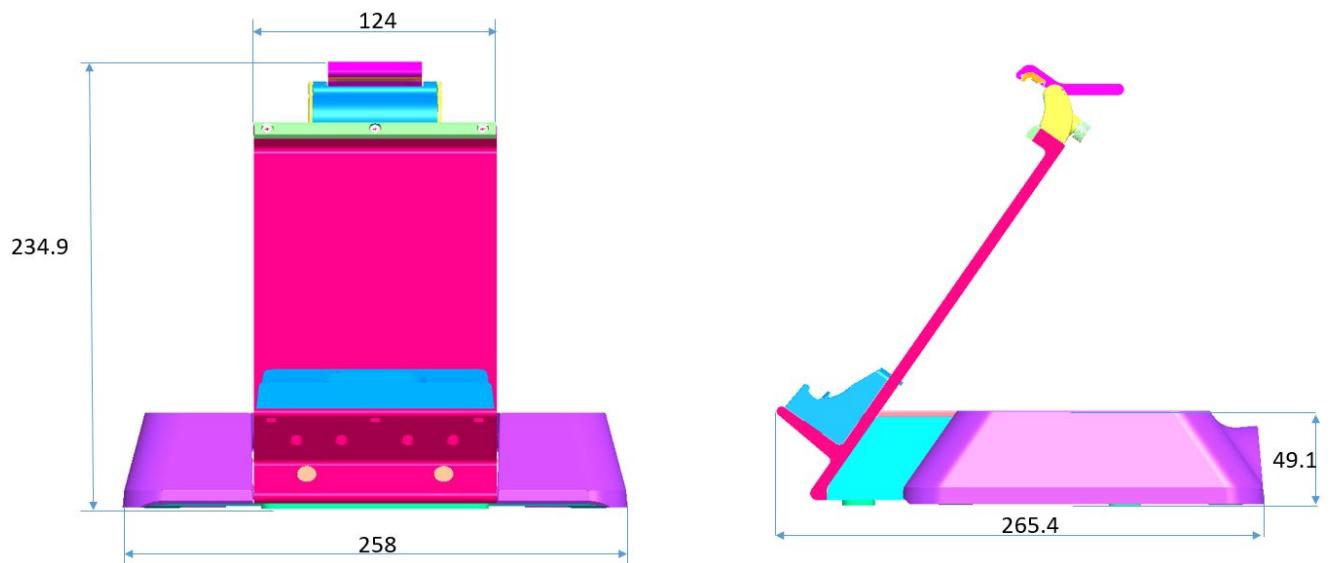


Figure3: Tegar TRT-3493-12 Docking Station Dimension (with Cable Cover)

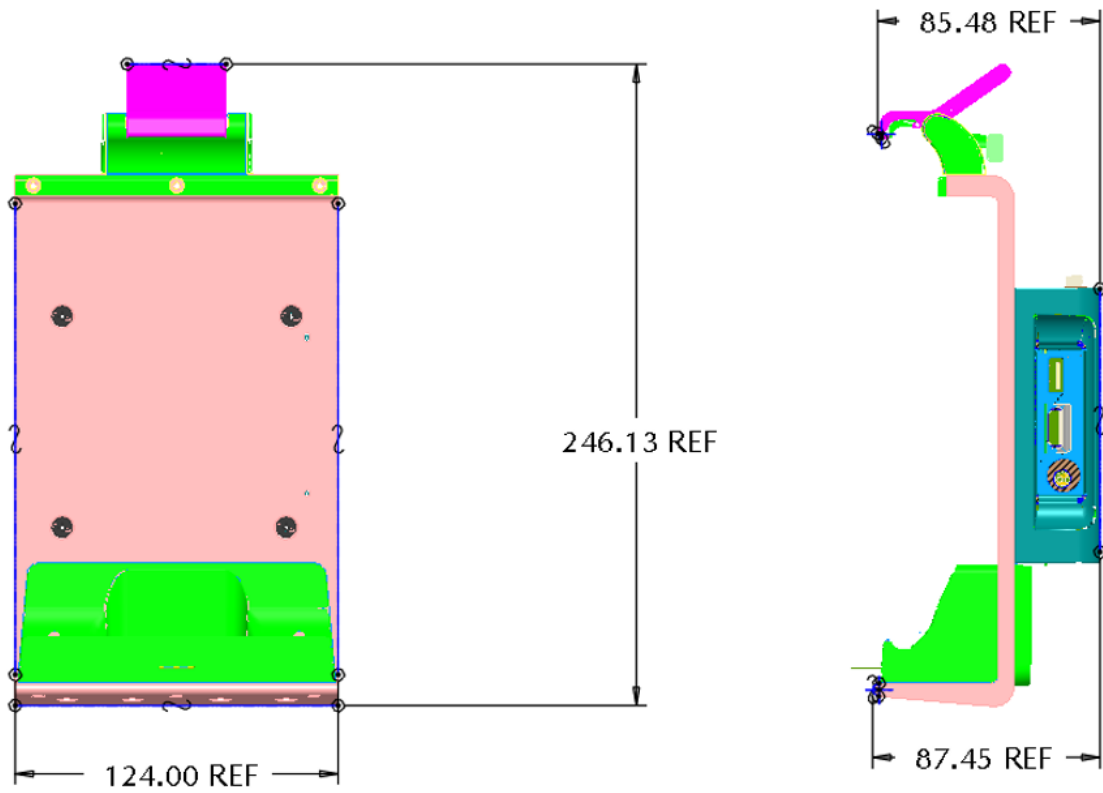


Figure4: Teguar TRT-3493-12 Extension Cover Dimension

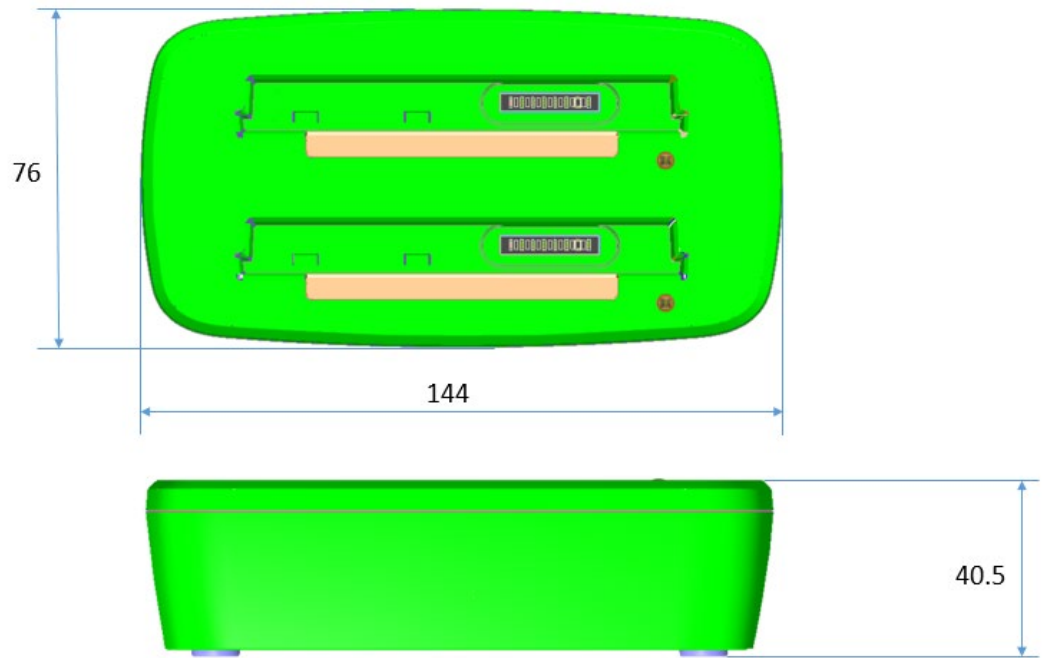


Figure5: Teguar TRT-3493-12 Battery Charger Dimension

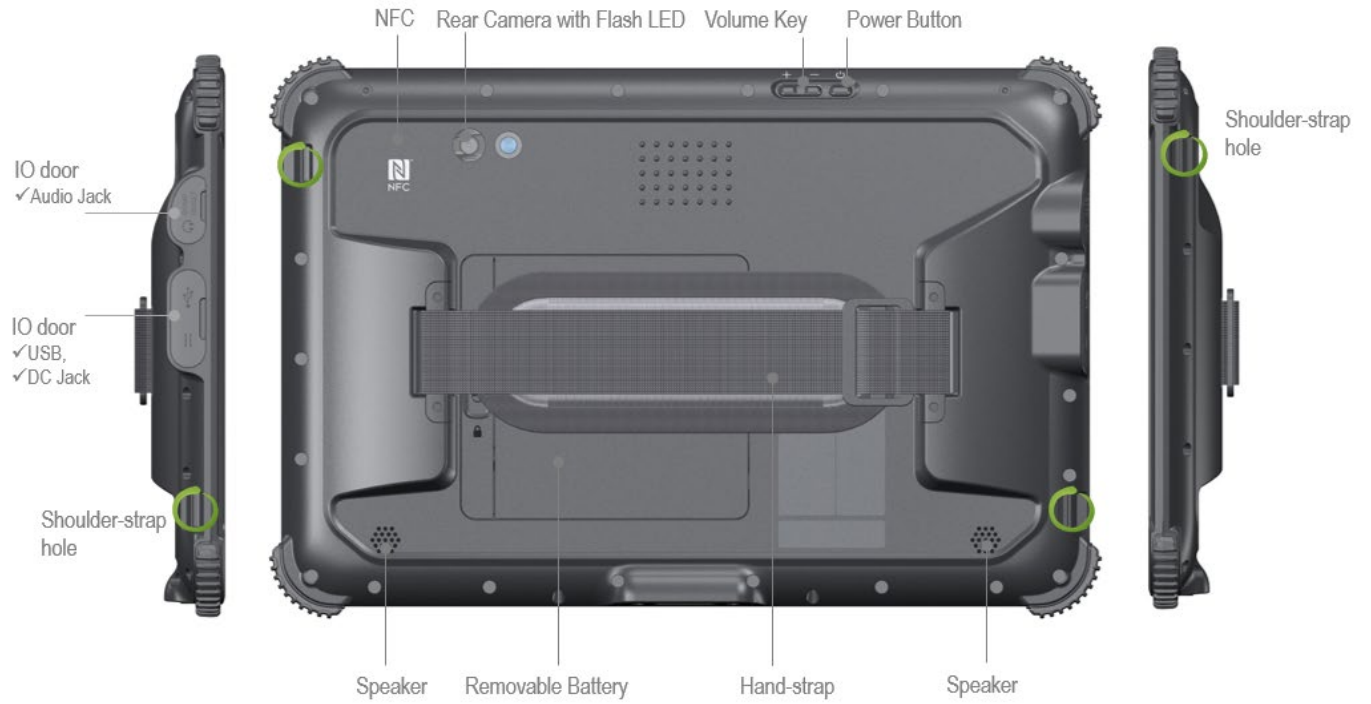


Figure6: Tugar TRT-3493-12 Tablet Placement

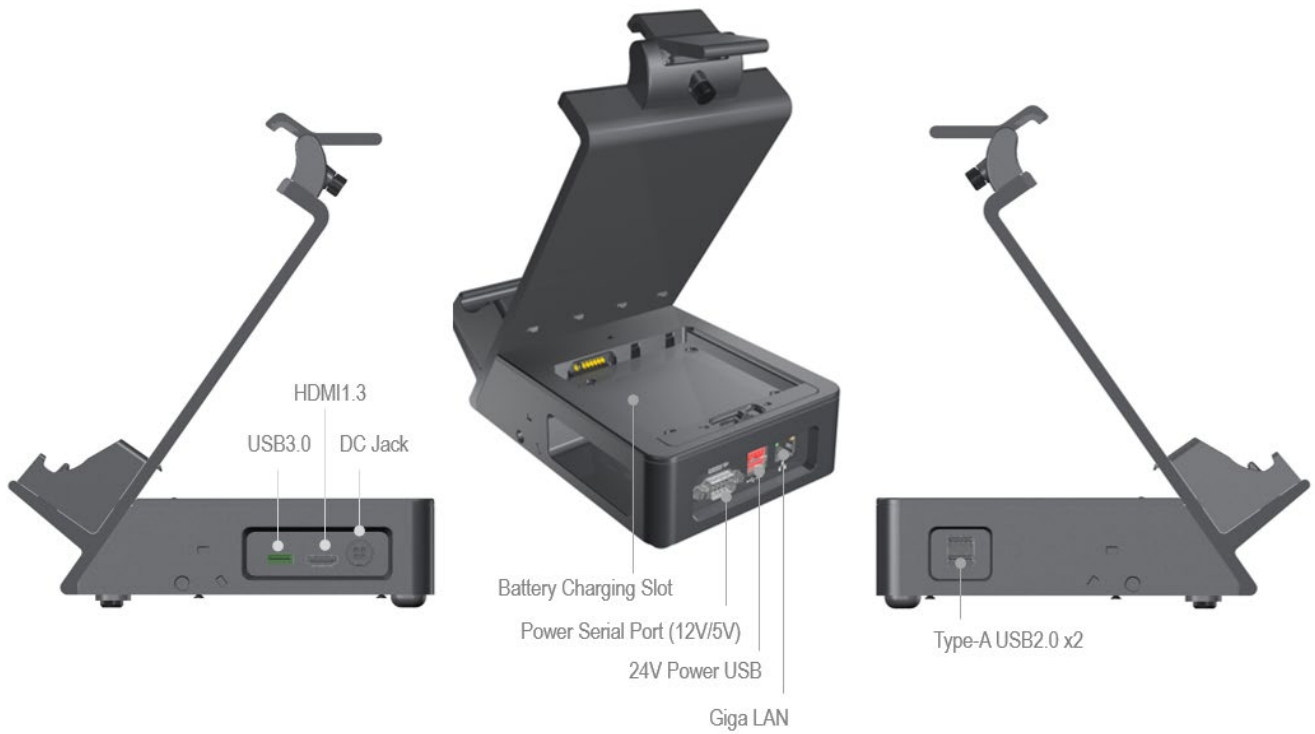


Figure7: Tugar TRT-3493-12 Docking Station Placement (without Cable Cover)

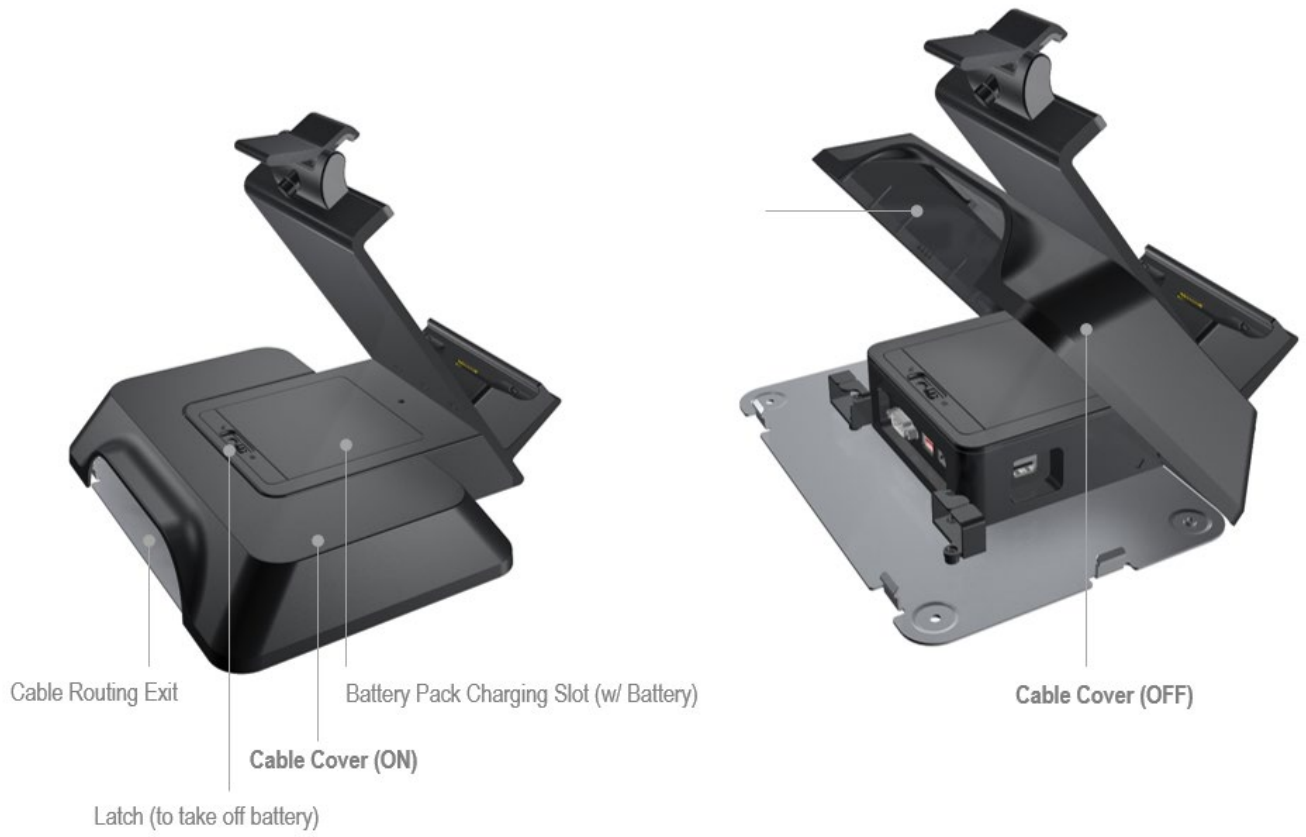


Figure8: Tegar TRT-3493-12 Docking Station Placement (with Cable Cover)

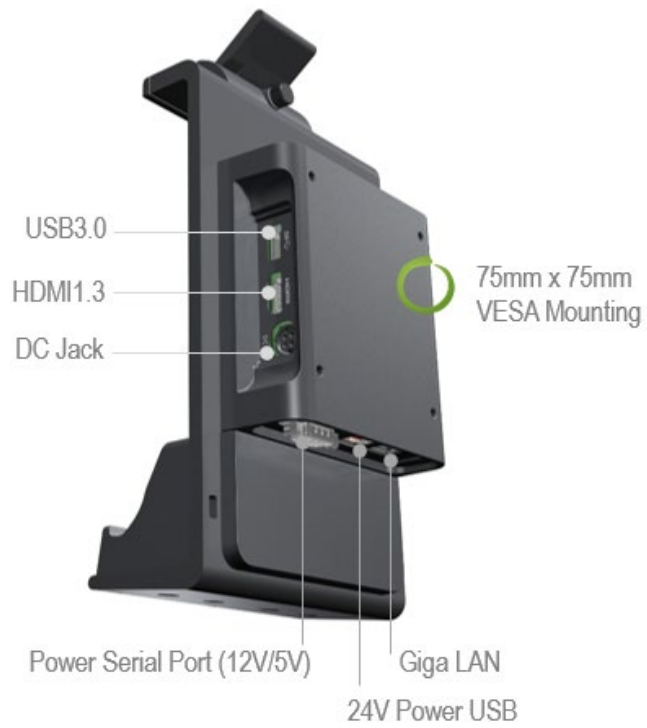


Figure9: Tegar TRT-3493-12 Extension Cover Placement

Battery Charger



DC Jack



2 battery packs SKU



1 battery pack SKU

LED
No battery insert : Green Blink
Charging : Green
Charging Complete : no Light

Figure10: Teguar TRT-3493-12 Battery charger Placement

Quick Start Guide

This chapter briefly describes the how to install Shoulder-strap and Cable Cover along with Docking Station as well as Capacitive Function Key on front panel side.

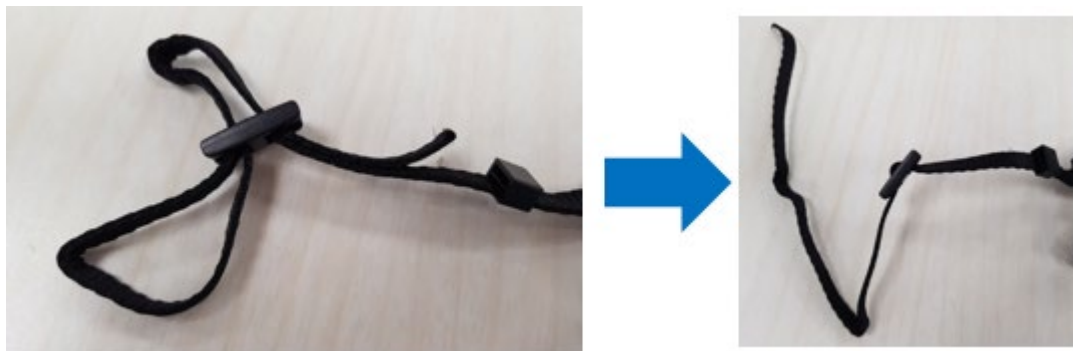
Shoulder-strap Quick Installation Guide

Shoulder-strap installation SOP as follows:

Step1: Place Shoulder-strap this way in front of you on the desk



Step2: Loose strap from buckle



Step3: Make strap go through the hole of Rear Cover and tighten well



Step4: Repeat same way as Step2 and Step3 on the other side (as following circle)



Step4: Complete



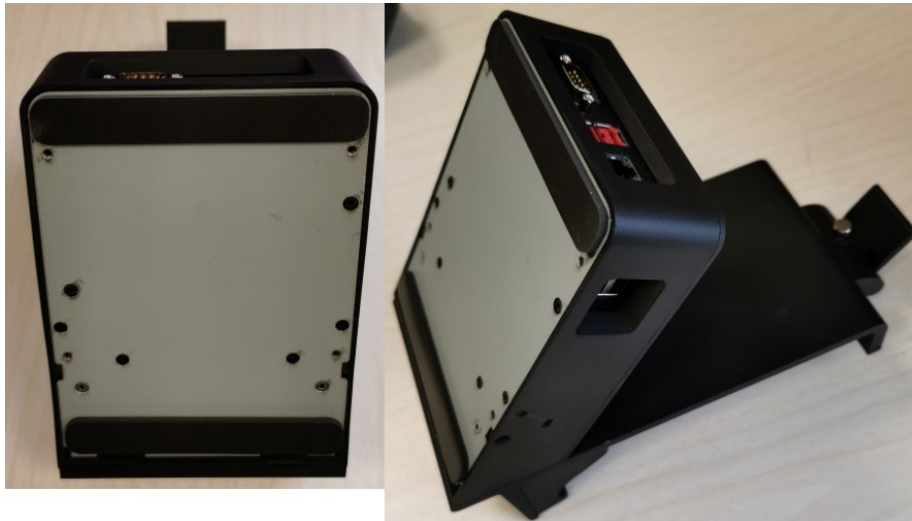
Cable Cover Quick Installation Guide

Cable Cover installation SOP as follows:

Step1: Place Docking Station this way in front of you on the desk



Step2: Put down the front side of Docking Station on the desk



Step3: Assemble Cable Cover



Step4: Assemble Bottom Plate



Step5: Screw on Bottom Plate with 4 screws



Battery charger Quick Installation Guide

Step1: Use TRT-3493-12's adapter to access the DC jack of the battery charger



Step2: Insert Battery to charge



Capacitive Function Key

Default key function in F1, F2 and F3 are:

F1: Rotation Lock

F2: Power Key

F3: Windows Home Key

However, any other requirements of usage would be considered as “support by request” from customized BIOS.

Please refer usage list as below Table1-1, Table1-2 and Table1-3 for detail.

| HID Index ² | Hot key | Usage Page | HID Usage ID ³ | Usage Name | Usage Type | Notes |
|------------------------|---------------------|-----------------------------|---------------------------|------------------------------|------------|---|
| 27 | No hot key for wake | Generic Desktop Page (0x01) | 0x83 | System Wake | OSC | For more details on the “Intel Proprietary Wake Source” please check section Error! Reference source not found.. |
| 21 to 26 | | Reserved for Internal Use | | | | |
| 20 | LFTAR W | Consumer Page (0x0C) | 0x70 | Display Brightness Decrement | RTC | |
| 19 | RTAR W | Consumer Page (0x0C) | 0x6F | Display Brightness Increment | RTC | |
| 18 | DWNA RW | Consumer Page (0x0C) | 0xEA | Volume Decrement | RTC | |
| 17 | UPAR W | Consumer Page (0x0C) | 0xE9 | Volume Increment | RTC | |
| 16 | END | Consumer Page (0x0C) | 0xE2 | Mute | OSC | |

Table1-1: Capacitive Function Key Usage List

| HID Index ² | Hot key | Usage Page | HID Usage ID ³ | Usage Name | Usage Type | Notes |
|------------------------|---------|-----------------------------|---------------------------|-----------------------|------------|--|
| 15 | PGDN | Consumer Page (0x0C) | 0xCD | Play/Pause | OSC | |
| 14 | PGUP | Consumer Page (0x0C) | 0xB7 | Stop | OSC | |
| 13 | HOME | Consumer Page (0x0C) | 0xB5 | Scan Next Track | OSC | |
| 13 | INS | Consumer Page (0x0C) | 0xB6 | Scan Previous Track | OSC | |
| 12 | | Reserved | | | | |
| 11 | F12 | Generic Desktop Page (0x01) | 0x82 | System Sleep | OSC | |
| 9 | O | Generic Desktop Page (0x01) | 0x81 | System Power Down | OSC | |
| 8 | I | Generic Desktop Page (0x01) | 0xC6 | Wireless Radio Button | OOC | Implemented. Spec says this is an OOC (On/Off Control). So, we should send '0' to turn off and '1' to turn on. However, on Windows 8 it works like all of the other OSC's and it toggles when the request is sent. Windows also turns airplane mode on/off when this HID request is sent to the OS. For now the driver always sends a '1'. The behavior is the same even when sending a '0'. |
| 7 | U | Keyboard/Keypad Page (0x07) | 0x4E | Page Down | SEL | Requires BIOS delay due to <Ctrl><Alt><Shift> being held for hot-key. |
| 6 | Y | Keyboard/Keypad Page (0x07) | 0x4B | Page Up | SEL | Requires BIOS delay due to <Ctrl><Alt><Shift> being held for hot-key. |
| 5 | T | Keyboard/Keypad Page (0x07) | 0x4D | End | SEL | Requires BIOS delay due to <Ctrl><Alt><Shift> being held for hot-key. |

Table1-2: Capacitive Function Key Usage List

| HID Index ² | Hot key | Usage Page | HID Usage ID ³ | Usage Name | Usage Type | Notes |
|------------------------|---------|---------------------------------------|---------------------------|---|------------|---|
| 4 | R | Keyboard/ Keypad Page (0x07) | 0x4A | Home | SEL | Requires BIOS delay due to <Ctrl><Alt><Shift> being held for hot-key. |
| 3 | E | Keyboard/ Keypad Page (0x07) | 0x53 | Num Lock | SEL | Requires BIOS delay due to <Ctrl><Alt><Shift> being held for hot-key. |
| 2 | W | Keyboard/ Keypad Page (0x07) | 0xE3 + 0x69 | Rotation Lock | | Requires BIOS delay due to <Ctrl><Alt><Shift> being held for hot-key. |
| 1 | Q | Keyboard/ Keypad Page (0x07) | 0xE3 | Keyboard Left GUI (windows button) | | Requires BIOS delay due to <Ctrl><Alt><Shift> being held for hot-key. |
| 0 | | - | - | - | | Index 0 is not supported. |

Table1-3: Capacitive Function Key Usage List

Managing System Power

This chapter briefly describes the guideline on external power supply, battery pack as well as Safety Notice.

AC Adapter

- Two AC adapters are designed for use with Tablet and peripheral respectively.
 - Tablet & Battery Charger : 19V/65W
 - Docking Station & Extension Cover : 24V/180W
- Connecting the AC adapter to another device could damage the adapter.
- The AC power cord supplied with Tablet is for use in the country where you purchased it. If you plan to go overseas with Tablet, consulting your dealer for corresponding power cord may be necessary.
- When unplugging the connector, always hold the plug head. Pulling on the cord would be prohibited.

The AC adapter serves as a converter from AC (Alternating Current) to DC (Direct Current) power as your Tablet runs on DC power. However, an electrical outlet usually provides AC power. Not only this but also charging the battery pack while connecting to AC power.

The adapter operates on the voltage range of 100 to 240V AC.

Battery Pack

The battery pack is hot-swappable design as well as the internal power source for Tablet. It is rechargeable by using the AC adapter.

- Hot-swappable features
 - Main Battery (2570mAh) supports hot-swappable and back-up battery(700mAh, non-removable) can provide provisional(30sec to 45sec) power to remain system awake until new main battery(2570mAh) reload.
 - Typical hot-swappable procedure:
 - Step1: Main battery(2570mAh) unloaded by latch unlocked
 - Step2: LCD backlite turned off (system is still waking)
 - Step3: Another main battery(2570mAh) reloaded by latch locked (click)
 - Step4: LCD backlite turned on

- Charging the battery pack
 - Charging will not be started if battery pack's temperature is out of allowed range which is between 0°C(32°F) and 45°C(113°F). Once the temperature meets the requirements, charging automatically resumes.
 - At the period of charging, please do not disconnect the AC adapter prior to fully-charge of battery, otherwise you will get a prematurely charged battery.
 - The battery has a high temperature protection mechanism which limits the maximum charge of the battery to 70% of total capacity in the event of high temperature conditions. Under this circumstances, the battery will be considered as fully charged at 70% capacity.
 - The battery level may automatically be reduced due to self-charge even when the battery pack is fully-charged (100%). Please be cautious that it happens no matter whether the battery pack is installed in the Tablet.

To charge the battery pack, connect the AC adapter to the Tablet and an electrical outlet. The battery indicator on front panel side shows amber to indicate charging status. Users will be suggested to remain Tablet power off while charging. Once battery is fully-charged, the battery indicator will be green.

It is expected approximately 3 hours to fully charge the battery pack when the power is OFF while approximately 3.5 hours when the power is ON (may need a longer charging time at lower temperature)

Initializing the Battery Pack

Users need to initialize a new battery pack before using it at the 1st time or when the actual operating time of the battery pack is much less than expected. Initializing would be the process of fully charging, discharging, and then charging. It may take several hours to be completed.

Note: All battery pack on tablet system would be default as shutdown mode and AC-ON would be necessary to initialize the battery pack when first out of box. (Users need to plug AC adapter charging to wake up system)

Battery Pack Guidelines

- When it is nearly discharged, users need to recharge the battery pack. While recharging, make sure the battery pack is fully charged. By this, it could avoid battery pack damaged.
- The battery pack is a consumable product and it will shorten battery life by doing so:
 - Charging the battery pack frequently
 - Using, charging or storing the battery pack in high temperature condition
- To avoid hastening the deterioration of the battery pack thereby prolonging its life time, minimize the number of times you perform battery charging.
- Charge the battery pack between 10°C (50°F) and 30°C (86°F) temperature range. A higher environment temperature will lead to battery packs' temperature raising-up.
- Avoid charging the battery pack inside a small space and in hot weather condition. Above all, charging will not be initialized if the battery pack is not within the allowed temperature range.
- It would be recommended that users do not charge the battery pack more than once a day.
- It is recommended that user charge the battery pack with the tablet's power-off.
- To maintain the battery pack's operating efficiency, store it in a cool place removed from the tablet system and with 30 % ~ 40 % charge remaining.
- When installing or removing the battery pack, please take notes of the following:
 - Avoid installing or removing the battery pack when the tablet system is in Sleep Mode. Abruptly removing the battery pack may cause loss of data or the tablet system may get unstable.
 - Avoid touching the battery pack terminals or damage may occur, thereby causing improper operation to it or the tablet system.

The tablet system's input voltage and ambient temperature will directly affect the battery pack's charge and discharge time:

- Charging time will be prolonged when the tablet system is power-on. To shorten the charging time, it is recommended that users place the tablet system in Sleep or Hibernation mode.
- A low temperature will prolong the charging time as well as hasten the discharge time.
- When using battery power in an extremely low temperature environment, users may experience shortened operating time and incorrect battery level reading. This phenomenon comes from the chemical characteristics of batteries. The appropriate operating temperature for the battery is 0°C (32°F) and 45°C(113°F).
- Please do not leave the battery pack in storage for more than two months without recharging it.

Solving Battery Problems

The battery does not charge (Battery Charge indicator does not light orange).

- Make sure that the AC adapter is properly connected.
- Make sure that the battery is not too hot or cold. Allow time for the battery pack to return to room temperature.
- If the battery doesn't charge after it has been stored in very low temperatures, try disconnecting and reconnecting the AC adapter to solve the problem.
- Make sure that the battery pack is installed correctly.
- Make sure that the battery terminals are clean.

The operating time of a fully charged battery becomes shorter.

- If you often partially recharge and discharge, the battery might not be charged to its full potential. Such results may lead to deterioration of battery pack.

The battery operating time indicated by the battery meter does not match the actual operating time.

- The actual operating time can be different from the estimated time, depending on how users are using the tablet system. If the actual operating time is much less than the estimated time, it may lead to deterioration of battery pack..

The tablet system does not resume from Sleep or Hibernation Mode.

- The tablet system automatically enters Sleep or Hibernation Mode when the battery pack is empty. Proceed any one of the following:
 - Connect the AC adapter to the tablet system.
 - Replace the empty battery pack with a fully charged one.

Solving Startup Problems

- When users turn on the tablet system, it does not respond and the Power Indicator does not light green.
 - If users are using an external AC power, make sure that the AC adapter is correctly and securely connected. If so, make sure that the electrical outlet works properly.
 - If users are using the battery power, make sure that the battery is not discharged.
 - When the ambient temperature is below -20 °C (-4 °F), tablet system might be unable to power on.
 - Tablet system is unable to power on without AC adapter and battery pack.

Safety Notices

About the Battery

Caution Texts Concerning Lithium Batteries

ENGLISH CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the equipment manufacturer. Discard used batteries according to manufacturer's instructions.

Français ATTENTION : Danger d'explosion si la pile n'est pas remplacée correctement. Remplacez uniquement par le même type ou un type équivalent recommandé par le fabricant de l'équipement. Jetez les piles usagées conformément aux instructions du fabricant.

RF Exposure Information (SAR)

This device meets the government's requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

The exposure standard employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/kg. Tests for SAR are conducted using standard operating positions accepted by the FCC with the EUT transmitting at the specified power level in different channels.

Tests for SAR are conducted using standard operating positions accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands. For body worn operation, this device has been tested and meets the FCC RF exposure guidelines for use with an accessory that contains no metal and be positioned a minimum of 0 cm from the body. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

The FCC has granted an Equipment Authorization for this device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this device is on file with the FCC and can be found under the Display Grant section of www.fcc.gov/eot/ea/fccid after searching on FCC ID: 2ADL6-TRT-3493-12.

To ensure that RF exposure levels remain at or below the tested levels, use a belt-clip, holster, or similar accessory that maintains a minimum separation distance of 0mm between your body and the device.

FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

CAUTION

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

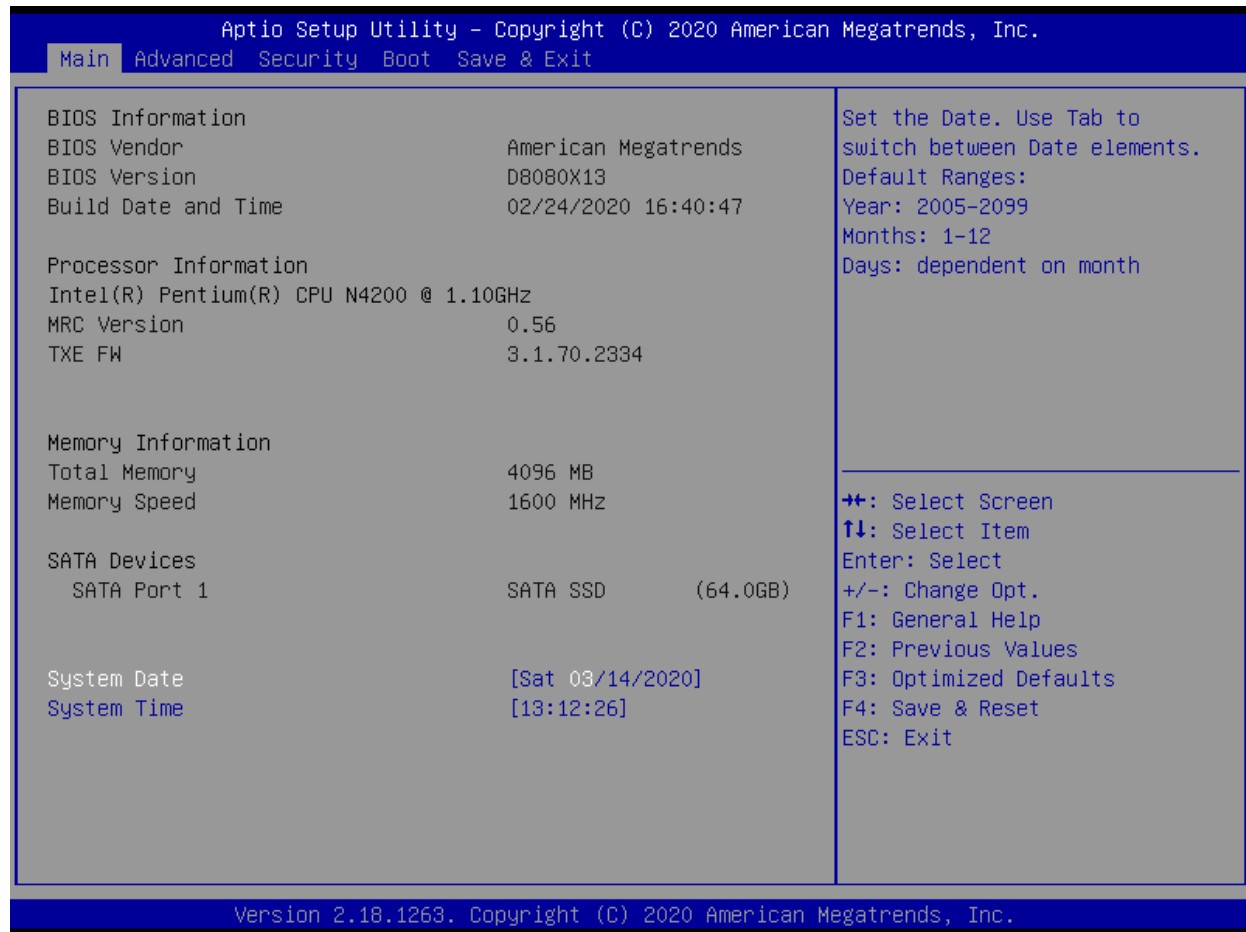
This device meets all the other requirements specified in Part 15E, Section 15.407 of the FCC Rules.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

BIOS Specification

1. MAIN PAGE



Aptio Setup Utility - Copyright (C) 2020 American Megatrends, Inc.

Main Advanced Security Boot Save & Exit

| | | |
|---|---------------------|--|
| BIOS Information | | Set the Date. Use Tab to switch between Date elements. |
| BIOS Vendor | American Megatrends | Default Ranges: |
| BIOS Version | D8080X13 | Year: 2005-2099 |
| Build Date and Time | 02/24/2020 16:40:47 | Months: 1-12 |
| Processor Information | | Days: dependent on month |
| Intel(R) Pentium(R) CPU N4200 @ 1.10GHz | | |
| MRC Version | 0.56 | |
| TXE FW | 3.1.70.2334 | |
| Memory Information | | |
| Total Memory | 4096 MB | |
| Memory Speed | 1600 MHz | |
| SATA Devices | | |
| SATA Port 1 | SATA SSD (64.0GB) | |
| System Date | [Sat 03/14/2020] | |
| System Time | [13:12:26] | |

++: 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) 2020 American Megatrends, Inc.

| BIOS Setup option name | Type | [Default] / Select Value | Show | Help string |
|------------------------|--------------------|------------------------------------|------------|---|
| Main | Page | | Yes | |
| BIOS Information | Header | | | |
| BIOS Vendor | Information string | American Megatrends | Yes | |
| BIOS Version | Information string | D8080X0x | Yes | |
| Build Date and Time | Information string | xx/xx/2019 hh:mm:ss | Yes | |
| | Line separator | | | |
| Processor Information | Header | | | |
| Processor Type | Information string | Intel® Pentium® CPU N4200 @1.10Ghz | Yes | |
| MRC Version | Information string | 0.56 | Yes | |
| TXE FW | Information string | 3.1.70.2334 | Yes | |
| | Line separator | | | |
| Memory Information | Header | | | |
| Total Memory | Board Information | 4096 MB | Yes | |
| Memory Solt0 | Board Information | 2048 MB (LPDDR4) | No | |
| Memory Solt1 | Board Information | 2048 MB (LPDDR4) | No | |
| Memory Speed | Board Information | 1600 MHz | Yes | |
| | Line separator | | | |
| SATA Devices | Line separator | | | |
| SATA Port 1 | Board Information | SATA SSD (64.0 GB) | Yes | |
| Serial ATA Port 2 | Board Information | xxxx xxxx xxxx | No | |
| Serial ATA Port 3 | Board Information | xxxx xxxx xxxx | No | |
| Serial ATA Port 4 | Board Information | xxxx xxxx xxxx | No | |
| | Line separator | | | |
| System Date | Changeable | [xxx xx/xx/xxx] | Yes | Set the Date. Use Tab to switch between Date elements. Default Ranges: Year: 2005-2099 Months: 1-12 Days: dependent on month |
| System Time | Changeable | [xx:xx:xx] | Yes | Set the Time. Use Tab to switch between Time elements. |

2. ADVANCED PAGE

Aptio Setup Utility - Copyright (C) 2020 American Megatrends, Inc.

Main **Advanced** Security Boot Save & Exit

| | | |
|-------------------------------|-----------|-----------------------|
| OS Selection | [Windows] | Select the target OS. |
| HD-Audio Support | [Enable] | |
| DVMT Pre-Allocated | [64M] | |
| DVMT Total Gfx Mem | [256M] | |
| ▶ Battery Warning Support | | |
| ▶ Trusted Computing | | |
| ▶ Hardware Monitor | | |
| ▶ S5 RTC Wake Settings | | |
| ▶ CPU Configuration | | |
| ▶ Network Stack Configuration | | |

++: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Reset
ESC: Exit

Version 2.18.1263. Copyright (C) 2020 American Megatrends, Inc.

Aptio Setup Utility - Copyright (C) 2020 American Megatrends, Inc.

Advanced

| | | |
|---------------------|----------|---|
| Low Battery Warning | [Enable] | Enable or Disable Low Battery Warning support.If system boot without the adaptor and battery is low during POST, system will shutdown after showing warning in few seconds. |
|---------------------|----------|---|

++: 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) 2020 American Megatrends, Inc.

Advanced

| | | |
|-------------------------------|------------|---|
| Pc Health Status | | Hardware Monitor Alert Enable and Disable. If monitored voltage/temperature/fan status are out of range, BIOS displays warning message during POST. |
| Hardware Monitor Alert Enable | [Disabled] | |
| VR_THRM_P1 | : +43 % | |
| VCC_MON | : +5.060 V | |
| VCC3_MON | : +3.286 V | |
| VCOR_MON | : +0.736 V | |
| V_SM_MON | : +1.104 V | |
| V_1P05 | : +1.056 V | |
| VCCRTC | : +3.232 V | |
| VCC3 | : +3.328 V | |
| 3VSB | : +3.328 V | ++: Select Screen ↑↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit |
| BACKUP_BAT_MON | : N/A | |

Advanced

| | | |
|---------------------|------------|---|
| Wake system from S5 | [Disabled] | Enable or disable System wake on alarm event. Select FixedTime, system will wake on the hr::min::sec specified. |
| | | |
| | | ++: Select Screen ↑↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Advanced

| | | | |
|--|---------------|--|---|
| CPU Configuration | | When enabled, a VMM can utilize the additional hardware capabilities provided by Vanderpool Technology | |
| Intel(R) Pentium(R) CPU N4200E @ 1.10GHz | | | |
| CPU Signature | 506CA | | |
| Microcode Patch | 1A | | |
| Max CPU Speed | 1100 MHz | | |
| Min CPU Speed | 800 MHz | | |
| Processor Cores | 4 | | |
| Intel HT Technology | Not Supported | | |
| Intel VT-x Technology | Supported | | |
| L1 Data Cache | | | ++: Select Screen ↑↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit |
| L1 Code Cache | | | |
| L2 Cache | | | |
| L3 Cache | | | |
| 64-bit | | | |
| Intel Virtualization Technology | | | [Enabled] |
| Burst Frequency | | | [Enabled] |

| BIOS Setup option name | Type | [Default] / Select Value | Show | Help string |
|---|-------------------|--|--------|--|
| Advanced | Page | | Yes | |
| LAN 1 | Select item | [Disabled] / Enabled | Yes | Enable/Disable LAN1 |
| LAN 2 | Select item | [Disabled] / Enabled | Yes | Enable/Disable LAN2 |
| LAN 3 | Select item | [Disabled] / Enabled | Yes | Enable/Disable LAN3 |
| MSATA | Select item | [Disabled] / Enabled | Yes | Enable/Disable MSATA |
| Wireless LAN RF | Select item | [Disabled] / Enabled | Depend | Enable/Disable Wireless Lan RF |
| Restore AC Power Loss | Select item | Turn on / Turn off / [Last state] | Yes | Select AC power state when power is re-applied after a power failure. |
| DeepSx Power Policies | Select item | [Disabled] / Enabled | Yes | Configure the DeepSx Mode configuration. |
| OS Selection | Select item | [Windows]/Intel Linux | Yes | Select the target OS |
| SCC SD Card Support (D27:F0) | Select item | [Disable] / Enable | No | Enable/Disable SCC SD Card Support |
| HD-Audio Support | Select item | Disable / [Enable] | | Enable/Disable HD-Audio Support |
| DVMT Pre-Allocated | Select item | [64M] / 128M / 256M / 512M | Yes | Select DVMT 5.0 Pre-Allocated (Fixed) Graphics Memory size used by the Internal Graphics Device. |
| DVMT Total Gfx Mem | Select item | 128MB/ [256MB] / Max | Yes | Select DVMT 5.0 Total Graphic Memory size used by the Internal Graphics Device. |
| ▶ Intel(R) I210 Gigabit Network Connection - | | | Yes | Configure Gigabit Ethernet device parameters |
| ▶ NIC Configuration | | | Yes | |
| Link Speed | Select item | [Auto] / 10 Mbps Half / 10 Mbps Full / 100 Mbps Half / 100 Mbps Full | Yes | |
| Wake On LAN | Select item | [Enabled] / Disabled | Yes | |
| ▶ NIC Configuration | | | Yes | |
| Link Speed | Select item | [Auto] / 10 Mbps Half / 10 Mbps Full / 100 Mbps Half / 100 Mbps Full | Yes | |
| Wake On LAN | Select item | [Enabled] / Disabled | Yes | |
| ▶ Battery Warning Support | | | Yes | Battery Warning Support |
| Low Battery Warning | Select item | [Disable] / Enable | Yes | Enable or Disable Low Battery Warning support. If system boot without the adaptor and battery is low during POST, system will shutdown after showing warning in few seconds. |
| ▶ Trusted Computing | | | Yes | Select fTPM/dTPM |
| TPM2.0 Device Found | Board Information | | | |
| Firmware Version: | Board Information | 7.2/301.9 | | |
| Vendor : | Board Information | NTC/INTC | | |
| | Line separator | | | |
| Security Device Support | Select item | Disabled / [Enabled] | Yes | 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. |
| TPM Select | Select item | fTPM / [dTPM] | Yes | Select fTPM/dTPM |

| BIOS Setup option name | Type | [Default] / Select Value | Show | Help string |
|--|--------------------|--|------------|---|
| Advanced | Page | | Yes | |
| ▶ NCT6683D Super IO Configuration | | | Yes | System Super IO Chip Parameters. |
| Super IO Chip | Information string | NCT6683D | Yes | |
| ▶ Serial Port 1 Configuration | | | Yes | Set Parameters of Serial Port 1 (COMA) |
| Serial Port | Select item | [Enabled] / Disabled | Yes | Enable or Disable Serial Port (COM) |
| Device Settings | Board Information | IO=3F8h; IRQ=4 | Yes | |
| Serial Port Mode | Line separator | | | |
| | Select item | 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 / Disable | Yes | Select Serial Port Mode |
| ▶ Serial Port 2 Configuration | | | Yes | Set Parameters of Serial Port 2 (COMC) |
| Serial Port | Select item | [Enabled] / Disabled | Yes | Enable or Disable Serial Port (COM) |
| Device Settings | Board Information | IO=2F8h; IRQ=3 | Yes | |
| Serial Port Mode | Line separator | | | |
| | Select item | 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 / Disable | Yes | Select Serial Port Mode |
| ▶ Serial Port 3 Configuration | | | Yes | Set Parameters of Serial Port 3 (COMD) |
| Serial Port | Select item | [Enabled] / Disabled | Yes | Enable or Disable Serial Port (COM) |
| Device Settings | Board Information | IO=2F8h; IRQ=3 | Yes | |
| ▶ Serial Port 4 Configuration | | | Yes | Set Parameters of Serial Port 4 (COME) |
| Serial Port | Select item | [Enabled] / Disabled | Yes | Enable or Disable Serial Port (COM) |
| Device Settings | Board Information | IO=2F8h; IRQ=3 | Yes | |
| ▶ Hardware Monitor | | | Yes | Monitor hardware status |
| Pc Health Status | Header | | | |
| Hardware Monitor Alert Enable | Line separator | | | |
| | Select item | Disabled / [Enabled] | Yes | Hardware Monitor Alert Enable and Disable. If monitored voltage/temperature/fan status are out of range, BIOS displays warning message during POST. |
| | Line separator | | | |
| VR_THRM_P1 | Board Information | + xx C | Yes | |
| System temperature2 | Board Information | + xx C | Yes | |
| AVSB | Board Information | +3.135~3.465 V | Yes | |
| VCC_MON | Board Information | +4.75~5.25 V | Yes | |
| VCC3_MON | Board Information | +3.135~3.465 V | Yes | |
| VCORE_MON | Board Information | +0.45~1.3 V | Yes | |
| V_SM_MON | Board Information | +1.045~1.155 V | Yes | |
| V_1P05 | Board Information | +0.099~1.103 V | Yes | |
| VCCRTC | Board Information | +3.135~3.465 V | Yes | |
| VCC3 | Board Information | +3.135~3.465 V | Yes | |
| 3VSB | Board Information | +3.135~3.465 V | Yes | |
| BACKUP_BAT_MON | Board Information | +3.0~4.2 V | Yes | |
| ▶ S5 RTC Wake Setting | | | Yes | Enable system to wake from S5 using RTC alarm |
| Wake System from S5 | Information string | [Disabled] / Fixed Time | Yes | Enabler or disable System wake on alarm event, Select FixedTime, system will wake on the hr:min:sec specified. |
| Wake up hour | Text input | [0] ~ 23 | Depend | Select 0-23 For example enter 3 for 3am and 15 for 3pm |
| Wake up minute | Text input | [0] ~ 59 | Depend | select 0 - 59 for Minute |
| Wake up second | Text input | [0] ~ 59 | Depend | select 0 - 59 for Second |
| ▶ CPU Configuration | | | Yes | CPU Configuration Parameters |
| Intel® Pentium® CPU N4200 @1.10Ghz | Information string | | Yes | |
| CPU Signature | Board Information | 506CA | Yes | |
| Microcode Patch | Board Information | 1A | Yes | |
| Max CPU Speed | Board Information | 1100 MHz | Yes | |
| Min CPU Speed | Board Information | 800 MHz | Yes | |
| Processor Cores | Board Information | 4 | Yes | |
| Intel HT Technology | Board Information | Supported / Not Supported | Yes | |
| Intel VT-x Technology | Board Information | Supported / Not Supported | Yes | |
| | Line separator | | | |
| L1 Data Cache | Board Information | 24 KB x 4 | Yes | |
| L1 Code Cache | Board Information | 32 KB x 4 | Yes | |
| L2 Cache | Board Information | 1024 KB x 2 | Yes | |
| L3 Cache | Board Information | Supported / Not Present | Yes | |
| 64-bit | Board Information | Supported / Not Supported | Yes | |
| | Line separator | | | |
| Intel Virtualization Technology | Select item | Disabled / [Enabled] | Yes | When enabled, a VMM can utilize the additional hardware capabilities provided by Vanderpool Technology |
| Burst Frequency | Select item | Disabled / [Enabled] | Yes | Burst Frequency. |
| ▶ Network Stack Configuration | | | Yes | Network Stack Settings |
| Network Stack | Select item | [Disabled] / Enabled | Yes | Enable/Disable UEFI Network Stack |
| Ipv4 PXE Support | Text input | [Disabled] / Enabled | Depend | Enable Ipv4 PXE Boot Support. If disabled IPV4 PXE boot option will not be created |
| Ipv6 PXE Support | Text input | [Disabled] / Enabled | Depend | Enable Ipv6 PXE Boot Support. If disabled IPV6 PXE boot option will not be created |

3. SECURITY

Aptio Setup Utility - Copyright (C) 2019 American Megatrends, Inc.

Main Advanced **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 style="width: 100%; border: none;"> <tr> <td style="width: 80%;">Minimum length</td> <td style="text-align: right;">3</td> </tr> <tr> <td>Maximum length</td> <td style="text-align: right;">20</td> </tr> </table> <p>Setup Administrator Password User Password</p> <p>▶ Secure Boot ▶ BIOS Update</p> | Minimum length | 3 | Maximum length | 20 | <p>Set Setup Administrator Password</p> <hr/> <p> ++: Select Screen ↑↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit </p> |
| Minimum length | 3 | | | | |
| Maximum length | 20 | | | | |

Version 2.18.1263. Copyright (C) 2019 American Megatrends, Inc.

Aptio Setup Utility - Copyright (C) 2019 American Megatrends, Inc.

Security

| | | | | | | | |
|--|-------------|-------|-------------|-----------|---------------------------|------------|--|
| <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;">System Mode</td> <td style="text-align: right;">Setup</td> </tr> <tr> <td>Secure Boot</td> <td style="text-align: right;">[Enabled]</td> </tr> <tr> <td>Secure Boot Customization</td> <td style="text-align: right;">[Standard]</td> </tr> </table> <p>▶ Key Management</p> | System Mode | Setup | Secure Boot | [Enabled] | Secure Boot Customization | [Standard] | <p>Secure Boot activated when: Secure Boot is enabled Platform Key(PK) is enrolled, System mode is User/Deployed, and CSM is disabled</p> <hr/> <p> ++: Select Screen ↑↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit </p> |
| System Mode | Setup | | | | | | |
| Secure Boot | [Enabled] | | | | | | |
| Secure Boot Customization | [Standard] | | | | | | |

Version 2.18.1263. Copyright (C) 2019 American Megatrends, Inc.

Security

▶ Path for ROM Image

Notice :
ROM Image must in the root folder of storage device.
File name must match with current BIOS project.

Enter the path to the BIOS update option

- ↔: Select Screen
- ↑↓: Select Item
- Enter: Select
- +/-: Change Opt.
- F1: General Help
- F2: Previous Values
- F3: Optimized Defaults
- F4: Save & Reset
- ESC: Exit

| BIOS Setup option name | Type | [Default] / Select Value | Show | Help string |
|------------------------------|--------------------|--------------------------|------|---|
| Security | Page | | Yes | |
| Password Description | Information string | | Yes | If Only the Administrator's password is set then this only limits access to Setup and is only asked for when entering Setup If ONLY the User's password is set, then this is a power on password and must be entered to boot or enter Setup. In Setup the User will have Administrator rights. The password length must be in the following range:□ |
| | Line separator | | Yes | |
| Setup Administrator Password | Input value | xxxx | Yes | Set Setup Administrator Password |
| User Password | Input value | xxxx | Yes | Set User Password. |
| | Line separator | | Yes | |
| * Secure Boot | | | Yes | Customizable Secure Boot settings. |
| System Mode | Board Information | xxxx | Yes | |
| | Line separator | | Yes | |
| Secure Boot | Select item | Disabled / [Enabled] | Yes | Secure Boot activated when: Secure Boot is enabled Platform Key(PK) is enrolled, System mode is User/Deployed, and CSM is disabled |
| | Line separator | | Yes | |
| Secure Boot Customization | Select item | [Standard] / Customer | Yes | 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 |
| | Line separator | | Yes | |

| BIOS Setup option name | Type | [Default] / Select Value | Show | Help string |
|--|--------------------|---|--------|--|
| Security | Page | | Yes | |
| ▶ Key Management | | | Yes | Enables experienced users to modify Secure Boot variables without full authentication. |
| Factory Key Provision | Select item | [Disabled] / Enabled | Depend | Provision factory default keys on next re-boot only when System in Setup Mode |
| | Line separator | | Depend | |
| ▶ Restore Factory Keys | Dialog | [Yes] / No | Depend | Force System to User Mode. Configure NVRAM to contain OEM-defined factory default Secure Boot keys. |
| ▶ Reset To Setup Mode | Dialog | [Yes] / No | Depend | Delete NVRAM content of all UEFI Secure Boot key databases. |
| ▶ Export Secure Boot variables | Dialog | Drive: \Path | Depend | Copy NVRAM content of Secure Boot variables to files in a root folder on a file system device |
| | Line separator | | Depend | |
| Secure Boot variables Size Keys Key Source | Information string | | Depend | |
| ▶ Platform Key(PK) | Select item | [Details] / Export / Update / Delete | Depend | Enroll Factory Defaults or load keys from a file: 1.Public Key Certificate in: a)EFI_SIGNATURE_LIST, b)EFI_CERT_X509 (DER encoded), c)EFI_CERT_RSA2048 (bin), d)EFI_CERT_SHA256,384,512 2.Authenticated UEFI Variable 3. EFI PE/COFF Image(SHA256) Key Source: Factory, External, Mixed |
| ▶ Key Exchange Keys | Select item | [Details] / Export / Update / Append / Delete | Depend | Enroll Factory Defaults or load keys from a file: 1.Public Key Certificate in: a)EFI_SIGNATURE_LIST, b)EFI_CERT_X509 (DER encoded), c)EFI_CERT_RSA2048 (bin), d)EFI_CERT_SHA256,384,512 2.Authenticated UEFI Variable 3. EFI PE/COFF Image(SHA256) Key Source: Factory, External, Mixed |
| ▶ Authorized Signatures | Select item | [Details] / Export / Update / Append / Delete | Depend | Enroll Factory Defaults or load keys from a file: 1.Public Key Certificate in: a)EFI_SIGNATURE_LIST, b)EFI_CERT_X509 (DER encoded), c)EFI_CERT_RSA2048 (bin), d)EFI_CERT_SHA256,384,512 2.Authenticated UEFI Variable 3. EFI PE/COFF Image(SHA256) Key Source: Factory, External, Mixed |
| ▶ Forbidden Signatures | Select item | [Details] / Export / Update / Append / Delete | Depend | Enroll Factory Defaults or load keys from a file: 1.Public Key Certificate in: a)EFI_SIGNATURE_LIST, b)EFI_CERT_X509 (DER encoded), c)EFI_CERT_RSA2048 (bin), d)EFI_CERT_SHA256,384,512 2.Authenticated UEFI Variable 3. EFI PE/COFF Image(SHA256) Key Source: Factory, External, Mixed |
| ▶ Authorized TimeStamps | Select item | [Details] / Export / Update / Append / Delete | Depend | Enroll Factory Defaults or load keys from a file: 1.Public Key Certificate in: a)EFI_SIGNATURE_LIST, b)EFI_CERT_X509 (DER encoded), c)EFI_CERT_RSA2048 (bin), d)EFI_CERT_SHA256,384,512 2.Authenticated UEFI Variable 3. EFI PE/COFF Image(SHA256) Key Source: Factory, External, Mixed |
| ▶ OsRecovery Signatures | Select item | [Details] / Export / Update / Append / Delete | Depend | Enroll Factory Defaults or load keys from a file: 1.Public Key Certificate in: a)EFI_SIGNATURE_LIST, b)EFI_CERT_X509 (DER encoded), c)EFI_CERT_RSA2048 (bin), d)EFI_CERT_SHA256,384,512 2.Authenticated UEFI Variable 3. EFI PE/COFF Image(SHA256) Key Source: Factory, External, Mixed |
| ▶ BIOS Update | | | Yes | BIOS Update support |
| ▶ Path for ROM Image | Dialog | Drive: \Path | Yes | Enter the path to the BIOS update option |
| | Line separator | | Yes | |
| Notice : | Information string | | Yes | ROM Image must in the root folder of storage device. File name must match with current BIOS project. |

4. BOOT

Aptio Setup Utility - Copyright (C) 2019 American Megatrends, Inc.

Main Advanced Security **Boot** Save & Exit

| | | |
|---------------------------------------|-----------------|---|
| Boot Configuration | | |
| Setup Prompt Timeout | 3 | Number of seconds to wait for setup activation key. 65535(0xFFFF) means indefinite waiting. |
| Bootup NumLock State | [On] | |
| FIXED BOOT ORDER Priorities | | |
| Boot Option #1 | [Hard Disk] | |
| Boot Option #2 | [USB Hard Disk] | |
| Boot Option #3 | [USB CD/DVD] | |
| Boot Option #4 | [USB Key] | |
| Boot Option #5 | [USB Floppy] | |
| Boot Option #6 | [USB Lan] | |
| ▶ UEFI Hard Disk 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 |
| ▶ UEFI USB Key Drive BBS Priorities | | |

Version 2.18.1263. Copyright (C) 2019 American Megatrends, Inc.

Aptio Setup Utility - Copyright (C) 2019 American Megatrends, Inc.

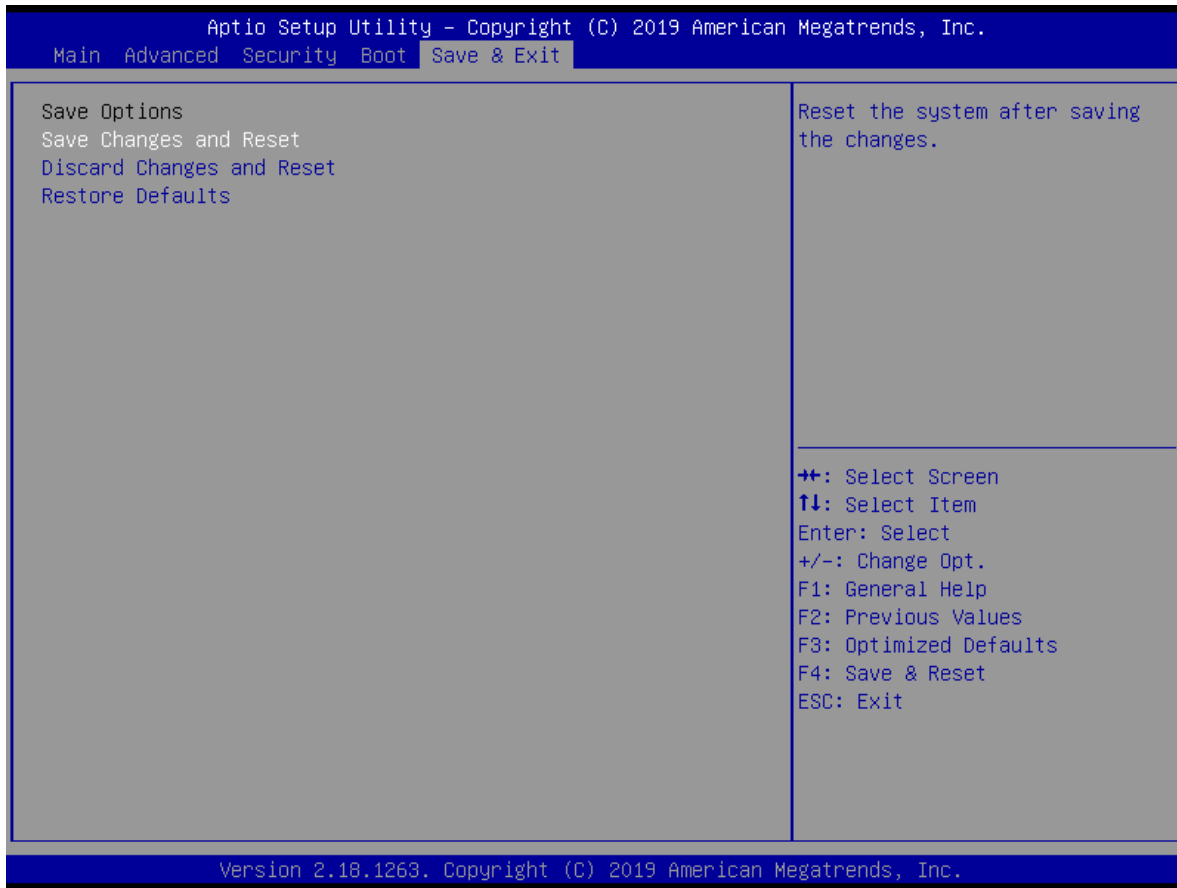
Boot

| | | |
|---|--------------------------|----------------------------|
| Boot Option #1 | [Windows Boot Manage...] | Sets the system boot order |
| ++: 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) 2019 American Megatrends, Inc.

| BIOS Setup option name | Type | [Default] / Select Value | Show | Help string |
|--|--------------------|-------------------------------------|------------|---|
| Boot | Page | | Yes | |
| Boot Configuration | Information string | | | |
| Setup Prompt Timeout | Input value | 3 | Yes | Number of seconds to wait for setup activation key. 65535(0xFFFF) means indefinite waiting. |
| Bootup NumLock State | Select item | [On] / Off | Yes | Select the keyboard NumLock state |
| | Line separator | | | |
| FIXED BOOT ORDER Priorities | Information string | | | |
| Boot Optoin #1 | Select item | Hard Disk | Yes | Set the system boot order |
| Boot Optoin #2 | Select item | CD/DVD | No | Set the system boot order |
| Boot Optoin #3 | Select item | SD | No | Set the system boot order |
| Boot Optoin #2 | Select item | USB Hard Disk | Yes | Set the system boot order |
| Boot Optoin #3 | Select item | USB CD/DVD | Yes | Set the system boot order |
| Boot Optoin #4 | Select item | USB Key:UEFI: xxxx | Yes | Set the system boot order |
| Boot Optoin #5 | Select item | USB Floppy | Yes | Set the system boot order |
| Boot Optoin #6 | Select item | USB LAN | Yes | Set the system boot order |
| Boot Optoin #9 | Select item | Network:UEFI: PXE xxxx | No | Set the system boot order |
| | Line separator | | | |
| * UEFI Hard Disk Drive BBS Priorities | | | Depend | Specifies the Boot Device Priority sequence from available UEFI Hard Disk Drives. |
| Boot Option #1 | Select item | | Depend | Sets the system boot order |
| Boot Option #2 | Select item | | Depend | Sets the system boot order |
| Boot Option #3 | Select item | | Depend | Sets the system boot order |
| Boot Option #4 | Select item | | Depend | Sets the system boot order |
| * UEFI USB Key Drive BBS Priorities | | | Depend | Specifies the Boot Device Priority sequence from available UEFI USB Key Drives. |
| Boot Option #1 | Select item | [UEFI: Generic Flash....] / Disable | Depend | Sets the system boot order |
| Boot Option #2 | Select item | [UEFI: Generic Flash....] / Disable | Depend | Sets the system boot order |
| Boot Option #3 | Select item | [UEFI: Generic Flash....] / Disable | Depend | Sets the system boot order |
| Boot Option #4 | Select item | [UEFI: Generic Flash....] / Disable | Depend | Sets the system boot order |
| * UEFI NETWORK Drive BBS Priorities | | | Depend | Specifies the Boot Device Priority sequence from available UEFI NETWORK Drives. |
| Boot Option #1 | Select item | [UEFI: PXE IPx] / Disable | Depend | Sets the system boot order |
| Boot Option #2 | Select item | [UEFI: PXE IPx] / Disable | Depend | Sets the system boot order |
| Boot Option #3 | Select item | [UEFI: PXE IPx] / Disable | Depend | Sets the system boot order |
| Boot Option #4 | Select item | [UEFI: PXE IPx] / Disable | Depend | Sets the system boot order |

5. SAVE & EXIT



| BIOS Setup option name | Type | [Default] / Select Value | Show | Help string |
|---------------------------|--------------------|--------------------------|------|--|
| Save & Exit | Page | | Yes | |
| Save Options | Information string | | | |
| Save Changes and Reset | Dialog | [Yes] / No | Yes | Reset the system after saving the changes. |
| Discard Changes and Reset | Dialog | [Yes] / No | Yes | Reset system setup without saving any changes. |
| Restore Defaults | Dialog | [Yes] / No | Yes | Restore/Load Default values for all the setup options. |