



Asus AAEON COM-TGHB6 User Manual

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17

Table Of Contents

18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67

68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88

--

•

[Table of Contents](#)

•

Bookmarks

[Download this manual](#)

Quick Links



COM-TGHB6

COM Express Module

st

User's Manual 1

Ed

Last Updated: September 1, 2022



Table of Contents

[Next Page](#)

1
2
3
4
5

Related Manuals for Asus AAEON COM-TGHB6

[Control Unit Asus Aaeon COM-SKUC6 User Manual](#)

Com express module (99 pages)

[Control Unit Asus AAEON COM-SKUC6 User Manual](#)

Com express module (100 pages)

[Control Unit Asus AAEON COM-WHUC6 User Manual](#)

Com express module (110 pages)

[Control Unit Asus AAEON COM-BYTC2 User Manual](#)

Com express module (91 pages)

[Control Unit Asus AAEON COM-BT-A30 User Manual](#)

Com express module (98 pages)

[Control Unit Asus AAEON COM-SKHB6 User Manual](#)

(76 pages)

[Control Unit Asus AAEON COM-TGUC6 User Manual](#)

Com express module (103 pages)

[Control Unit Asus AAEON COM-ADNC6 User Manual](#)

Com express module (89 pages)

[Control Unit Asus Aaeon NanoCOM-APL User Manual](#)

Com express module (77 pages)

[Control Unit Asus ThunderboltEX 3-TR User Manual](#)

(14 pages)

[Control Unit Asus TPM-SPI Quick Start Manual](#)

14-1 pin (4 pages)

[Control Unit Asus AAEON MXM-ACMA User Manual](#)

(26 pages)

[Control Unit Asus AAEON MIPICSI Camera RVP Converter Kit User Manual](#)

Up expansion module (47 pages)

[Control Unit Asus Aaeon NanoCOM-TGU User Manual](#)

Com express module (95 pages)

[Control Unit Asus AAEON ASDM-L-CFS User Manual](#)

Smart display module (82 pages)

[Control Unit Asus Aaeon NIM-S26B Quick Installation Manual](#)

Network interface module (23 pages)

Summary of Contents for Asus AAEON COM-TGHB6

[Page 1](#) COM-TGHB6 COM Express Module User's Manual 1 Last Updated: September 1, 2022...

[Page 2](#) Copyright Notice This document is copyrighted, 2022. All rights are reserved. The original manufacturer reserves the right to make improvements to the products described in this manual at any time without notice. No part of this manual may be reproduced, copied, translated, or transmitted in any form or by any means without the prior written permission of the original manufacturer.

[Page 3](#) Acknowledgements All other products' name or trademarks are properties of their

respective owners. Microsoft Windows is a registered trademark of Microsoft Corp. • Intel® and Celeron® are registered trademarks of Intel Corporation • Intel Core™ is a trademark of Intel Corporation •...

[Page 4](#) Packing List Before setting up your product, please make sure the following items have been shipped: Item Quantity COM-TGHB6 • If any of these items are missing or damaged, please contact your distributor or sales representative immediately. Preface...

[Page 5](#) About this Document This User's Manual contains all the essential information, such as detailed descriptions and explanations on the product's hardware and software features (if any), its specifications, dimensions, jumper/connector settings/definitions, and driver installation instructions (if any), to facilitate users in setting up their product. Users may refer to the product page at AAEON.com for the latest version of this document.

[Page 6](#) Safety Precautions Please read the following safety instructions carefully. It is advised that you keep this manual for future references All cautions and warnings on the device should be noted. Make sure the power source matches the power rating of the device. Position the power cord so that people cannot step on it.

[Page 7](#) If any of the following situations arises, please the contact our service personnel: Damaged power cord or plug Liquid intrusion to the device iii. Exposure to moisture Device is not working as expected or in a manner as described in this manual The device is dropped or damaged Any obvious signs of damage displayed on the device...

[Page 8](#) FCC Statement This device complies with Part 15 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.

[Page 9](#) China RoHS Requirements (CN) AAEON Main Board/ Daughter Board/ Backplane (Pb) (Hg) (Cd) (Cr(VI)) (PBB) (PBDE) ...

[Page 10](#) China RoHS Requirement (EN) Poisonous or Hazardous Substances or Elements in Products AAEON Main Board/ Daughter Board/ Backplane Poisonous or Hazardous Substances or Elements Hexavalent Polybrominated Polybrominated Component Lead Mercury Cadmium Chromium Biphenyls Diphenyl Ethers (Pb) (Hg) (Cd) (Cr(VI)) (PBB) (PBDE) PCB &...

[Page 11: Table Of Contents](#)

Table of Contents Chapter 1 - Product Specifications.....	1
Specifications	2
Chapter 2 - Hardware Information	4
Dimensions	5
Jumpers and Connectors	7
List of Connectors	8
2.3.1 COM Express ROW A/B Connector (COMAB1)	8
2.3.2 COM Express ROW C/D Connector (COMCD1)	

Page 12 3.5.1 PCI Express Configuration.....	40
3.5.2 Storage Configuration	44
3.5.3 NMVe Configuration	46
3.5.4 VMD Setup Menu	47
3.5.5 HD Audio Configuration	48
3.5.6 Digital IO Port Configuration	49
3.5.7 Legacy Logical Devices Configuration	50
3.5.7.1 Serial Port 1 Configuration	

[Page 13: Chapter 1 - Product Specifications](#)

Chapter 1 Chapter 1 - Product Specifications...

[Page 14: Specifications](#)

Specifications System Form Factor COM Express Basic Size, Type 6 11th Generation Intel® Xeon/Core™ Processor CPU Frequency Up to 2.6 GHz, 8 Core, W-11865MRE/ I7-11850HE Chipset Intel 500 series PCH QM580E/RM590E Memory Type SODIMM DDR4 3200MHz Socket x 2 Max. Memory Capacity Up to 64 GB (ECC Support by SKU) BIOS AMI BIOS (UEFI)

[Page 15](#) Display VGA/LCD Controller Intel® UHD Graphics,18/24b 2CH LVDS, or 4 lane eDP Video Output DDI x 3 LVDS or eDP x 1 (Default: LVDS) VGA x 1 Ethernet Intel® i225/i226LM/IT GbE x 1 Audio High Definition Audio Interface USB Port USB 2.0 x 8, USB 3.2 Gen 2 x 4 Serial Port 2-Wire UART (TX/RX) x 2...

[Page 16: Chapter 2 - Hardware Information](#)

Chapter 2 Chapter 2 - Hardware Information...

[Page 17: Dimensions](#)

Dimensions Chapter 2 - Hardware Information...

[Page 18](#) With Active Cooler (Part No: COM-TGHB6-FAN01) With Heat Spreader and Active Cooler (Part No: COM- TGHB6-HSP01 and COM-FAN02) Chapter 2 - Hardware Information...

[Page 19: Jumpers And Connectors](#)

Jumpers and Connectors Top Side Bottom Side Chapter 2 - Hardware Information...

[Page 20: List Of Connectors](#)

List of Connectors Please refer to the table below for all of the board's connectors that you can configure for your application Label Function DDR4 SO-DIMM / CHA Slot0 CN17 DDR4 SO-DIMM / CHA Slot1 COMAB1 Express ROW A/B Connector COMCD1 Express ROW C/D Connector SPI1...

[Page 21](#) Row A Row B Signal Signal GBE0_MDI0+ SMB_CK GBE0_CTREF (NC) SMB_DAT SUS_S3# SMB_ALERT# SATA0_TX+ SATA1_TX+ SATA0_TX- SATA1_TX- SUS_S4# SUS_STAT# SATA0_RX+ SATA1_RX+ SATA0_RX- SATA1_RX- GND (FIXED) GND (FIXED) SATA2_TX+ SATA3_TX+ SATA2_TX- SATA3_TX- SUS_S5# PWR_OK SATA2_RX+ SATA3_RX+ SATA2_RX- SATA3_RX- BATLOW# ATA_ACT# AC_SDIN2 (NC) AC_SYNC AC_SDIN1 AC_RST#...

[Page 22](#) Row A Row B Signal Signal USB_6_7_OC# USB_4_5_OC# USB4- USB5- USB4+ USB5+ GND (FIXED) GND (FIXED) USB2- USB3- USB2+ USB3+ USB_2_3_OC# USB_0_1_OC# USB0- USB1- USB0+ USB1+ EXCD1_PERST# VCC_RTC (BUF_CB_RST# Option) EXCD0_PERST# EXCD1_CPPE# (NC) (BUF_CB_RST# Option) EXCD0_CPPE# (NC) SYS_RESET# LPC_SERIRQ CB_RESET# GND (FIXED) GND (FIXED) PCIE_TX5+...

[Page 23](#) Row A Row B Signal Signal PCIE_TX2+ PCIE_RX2+ PCIE_TX2- PCIE_RX2- GPI1 GPO3 PCIE_TX1+ PCIE_RX1+ PCIE_TX1- PCIE_RX1- WAKE0# GPI2 WAKE1# PCIE_TX0+ PCIE_RX0+ PCIE_TX0- PCIE_RX0- GND (FIXED) GND (FIXED) LVDS_A0+ LVDS_B0+ LVDS_A0- LVDS_B0- LVDS_A1+ LVDS_B1+ LVDS_A1- LVDS_B1- LVDS_A2+ LVDS_B2+ LVDS_A2- LVDS_B2- LVDS_VDD_EN LVDS_B3+ LVDS_A3+ LVDS_B3-...

[Page 24](#) Row A Row B Signal Signal RSVD(KBRST Option) VCC_5V_SBY RSVD (EDP_HPDP) VCC_5V_SBY PCIE0_CK_REF+ BISO_DIS1# PCIE0_CK_REF- VGA_RED_GND (FIXED) GND (FIXED) SPI_POWER VGA_GRN SPI_MISO VGA_BLU GPO0 VGA_HSYNC SPI_CLK VGA_VSYNC SPI_MOSI VGA_I2C_CK TPM_PP VGA_I2C_DAT TYPE10# (NC) SPI_CS# SER0_TX RSVD (SMI# Option) SER0_RX RSVD (SCI# Option) A100...

[Page 25: Com Express Row C/D Connector \(Comcd1\)](#)

2.3.2 COM Express ROW C/D Connector (COMCD1) Row C Row D Signal Signal GND (FIXED) GND (FIXED) USB_SSRX0- USB_SSTX0- USB_SSRX0+ USB_SSTX0+ USB_SSRX1- USB_SSTX1- USB_SSRX1+ USB_SSTX1+ USB_SSRX2- USB_SSTX2- USB_SSRX2+ USB_SSTX2+ GND (FIXED) GND (FIXED) USB_SSRX3- USB_SSTX3- USB_SSRX3+ USB_SSTX3+ DDI1_PAIR6+ (NC) DDI1_CTRLCLK_AUX+ DDI1_PAIR6- (NC) DDI1_CTRLDATA_AUX- RSVD (NC)

[Page 26](#) Row C Row D Signal Signal DDI1_HPDP RSVD (NC) DDI1_PAIR4+ (NC) RSVD (NC) DDI1_PAIR4- (NC) DDI1_PAIR0+ RSVD (NC) DDI1_PAIR0- RSVD (NC) RSVD (NC) DDI1_PAIR5+ (NC) DDI1_PAIR1+ DDI1_PAIR5- (NC) DDI1_PAIR1- GND (FIXED) GND (FIXED) DDI2_CTRLCLK_AUX+ DDI1_PAIR2+ DDI2_CTRLDATA_AUX- DDI1_PAIR2- DDI2_DDC_AUX_SEL DDI1_DDC_AUX_SEL RSVD (NC) RSVD (NC) DDI3_CTRLCLK_AUX+ DDI1_PAIR3+...

[Page 27](#) Row C Row D Signal Signal DDI3_PAIR3+ DDI2_PAIR3+ DDI3_PAIR3- DDI2_PAIR3- GND (FIXED) GND (FIXED) PEG_RX0+ PEG_TX0+ PEG_RX0- PEG_TX0- TYPE0# (NC) PEG_LAN_RV# PEG_RX1+ PEG_TX1+ PEG_RX1- PEG_TX1- TYPE1# (NC) TYPE2# PEG_RX2+ PEG_TX2+ PEG_RX2- PEG_TX2- GND (FIXED) GND (FIXED) PEG_RX3+ PEG_TX3+ PEG_RX3- PEG_TX3- RSVD (NC) RSVD (NC) RSVD (NC)

[Page 28](#) Row C Row D Signal Signal PEG_RX7+ PEG_TX7+ PEG_RX7- PEG_TX7- GND (FIXED) GND (FIXED) RSVD (NC) RSVD (NC) PEG_RX8+ PEG_TX8+ PEG_RX8- PEG_TX8- GND (FIXED) GND

(FIXED) PEG_RX9+ PEG_TX9+ PEG_RX9- PEG_TX9- RSVD (NC) RSVD (NC) PEG_RX10+ PEG_TX10+ PEG_RX10- PEG_TX10- PEG_RX11+ PEG_TX11+ PEG_RX11- PEG_TX11- GND (FIXED)

[Page 29](#) Row C Row D Signal Signal PEG_RX14- PEG_TX14- C100 GND (FIXED) D100 GND (FIXED) C101 PEG_RX15+ D101 PEG_TX15+ C102 PEG_RX15- D102 PEG_TX15- C103 D103 C104 VCC_12V D104 VCC_12V C105 VCC_12V D105 VCC_12V C106 VCC_12V D106 VCC_12V C107 VCC_12V D107 VCC_12V C108 VCC_12V D108...

[Page 30: Function Block Diagram](#)

Function Block Diagram Chapter 2 – Hardware Information...

[Page 31: Chapter 3 - Ami Bios Setup](#)

Chapter 3 Chapter 3 - AMI BIOS Setup...

[Page 32: System Test And Initialization](#)

System Test and Initialization The board uses certain routines to test and initialize board hardware. If the routines encounter an error during the tests, you will either hear a few short beeps or see an error message on the screen. There are two kinds of errors: fatal and non-fatal. The system can usually continue the boot up sequence with non-fatal errors.

[Page 33: Ami Bios Setup](#)

AMI BIOS Setup The AMI BIOS ROM has a built-in Setup program that allows users to modify the basic system configuration. This information is stored in the battery-backed CMOS RAM and BIOS NVRAM so it retains the Setup information when the power is turned off. To enter Setup, power on the computer and press ...

[Page 34: Setup Submenu: Main](#)

Setup Submenu: Main Chapter 3 – AMI BIOS Setup...

[Page 35: Setup Submenu: Advanced](#)

Setup Submenu: Advanced Chapter 3 – AMI BIOS Setup...

[Page 36: Graphics Configuration](#)

3.4.1 Graphics Configuration Options Summary VBT Select LVDS on eDP on eDP/LVDS Off Optimal Default, Failsafe Default Select VBT for GOP Driver. Chapter 3 – AMI BIOS Setup...

[Page 37: Lvds Panel Configuration](#)

3.4.1.1 LVDS Panel Configuration Options Summary Panel Type 640x480@60Hz 800x480@60Hz 800x600@60Hz 1024x600@60Hz 1024x768@60Hz Optimal Default, Failsafe Default 1280x768@60Hz 1280x800@60Hz 1280x1024@60Hz 1366x768@60Hz 1440x900@60Hz 1600x1200@60Hz 1920x1080@60Hz 1920x1200@60Hz Select panel type. Chapter 3 – AMI BIOS Setup...

[Page 38](#) Options Summary Single channel Optimal Default, Failsafe Default Panel Mode Dual channel Panel mode selection for Single channel and Dual. Color Depth 18-Bit Optimal Default, Failsafe Default 24-Bit 36-Bit 48-Bit Select panel type. Backlight Mode BIOS & Application Windows Slider Optimal Default, Failsafe Default Select backlight control signal type.

[Page 39: Cpu Configuration](#)

3.4.2 CPU Configuration Options Summary Active Processor Cores Optimal Default, Failsafe Default Number of cores to enable in each processor package. Turbo Mode Disabled Enabled Optimal Default, Failsafe Default Enable/Disable processor Turbo Mode (requires EMTTM enabled too). AUTO means enabled. Hyper-Threading Disabled Enabled...

[Page 40: Memory Configuration](#)

Options Summary Intel (VMX) Virtualization Disabled Technology Enabled Optimal Default, Failsafe Default When enabled, a VMM can utilize the additional hardware capabilities provided by Vanderpool Technology. 3.4.3 Memory Configuration Chapter 3 – AMI BIOS Setup...

[Page 41: On-Module H/W Monitor](#)

3.4.4 On-Module H/W Monitor Chapter 3 – AMI BIOS Setup...

[Page 42: Smart Fan Mode Configuration](#)

3.4.4.1 Smart Fan Mode Configuration FAN 1: Full Mode Options Summary FAN 1 Full Mode Optimal Default, Failsafe Default Manual Mode by PWM Auto Mode by PWM Smart Fan Mode Select. PWM signal Non-inverting Optimal Default, Failsafe Default Inverting Select output PWM of inverting or non-inverting signal. Chapter 3 –...

[Page 43](#) FAN 1: Manual Mode by PWM Options Summary Manual Setting Optimal Default, Failsafe Default Set Fan at fixed Duty-Cycle Min=0 Max=100 Please input Dec number: Chapter 3 – AMI BIOS Setup...

[Page 44](#) FAN 1: Auto Mode by PWM Options Summary Monitor Thermal CPU Temperature (PECI) Optimal Default, Failsafe Default Thermal Source 1(T1) Thermal Source 2(T2) Select monitor thermal source. Temperature of Start Optimal Default, Failsafe Default Temperature of Start. Temperature of Off Optimal Default, Failsafe Default Temperature of Off.

[Page 45: Pch-Fw Configuration](#)

Options Summary 32 (PWM) 64 (PWM) Slope (PWM). 3.4.5 PCH-FW Configuration Chapter 3 – AMI BIOS Setup...

[Page 46: Firmware Update Configuration](#)

3.4.5.1 Firmware Update Configuration Options Summary Me FW Image Disabled Optimal Default, Failsafe Default Re-Flash Enabled Enable/ Disable Me FW Image Re-Flash Function. FW Update Disabled Enabled Optimal Default, Failsafe Default Enable/Disable ME FW Update Function. Chapter 3 – AMI BIOS Setup...

[Page 47: On-Module Configuration](#)

3.4.6 On-Module Configuration Options Summary Battery Management Disabled Optimal Default, Failsafe Default One Battery Enable to support battery in ACPI OS by I2C_CK, I2C_DAT (B33, B34) EC-SMB-HC Support Disabled Optimal Default, Failsafe Default Enabled I2C Host Controller Interface via Embedded Controller. Chapter 3 –...

[Page 48: Power Management](#)

3.4.7 Power Management Options Summary Power Mode ATX Type Optimal Default, Failsafe Default AT Type Select system power mode. Restore AC Power Loss Last State Always On Always Off Optimal Default, Failsafe Default SIO Restore AC Power Loss: To decide the behavior after system power cut then resupply.

[Page 49: Aaeon Bios Robot](#)

3.4.8 AAEON BIOS Robot Options Summary Sends watch dog before Disabled Optimal Default, Failsafe Default BIOS POST Enabled Enabled - Robot set Watch Dog Timer (WDT) right after power on, before BIOS start POST process. And then Robot will clear WDT on completion of POST. WDT will reset system automatically if it is not cleared before its timer counts down to zero.

[Page 50](#) Options Summary Enabled - Robot holds BIOS from starting POST, right after power on. This allows BIOS POST to start with stable power or start after system is physically warmed-up. Note: Robot does this before 'Send watch dog'. Delayed POST Disabled Optimal Default, Failsafe Default (DXE phase)

[Page 51: Setup Submenu: Chipset](#)

Setup Submenu: Chipset Chapter 3 – AMI BIOS Setup...

[Page 52: Pci Express Configuration](#)

3.5.1 PCI Express Configuration Chapter 3 – AMI BIOS Setup...

[Page 53](#) Options Summary PCI Express Root Port Disabled Enabled Optimal Default, Failsafe Default Control the PCI Express Root Port. PCIe Speed Auto Optimal Default, Failsafe Default

Gen1 Gen2 Gen3 Gen4 Configure PCIe Speed. Hot Plug Disabled Optimal Default, Failsafe Default Enabled PCI Express Hot Plug Enable/Disable.

[Page 54](#) Options Summary PCI Express Hot Plug Enable/Disable. PCI Express 2 Disable Enable Optimal Default, Failsafe Default Control the PCI Express Root Port. PCIe Speed Auto Optimal Default, Failsafe Default Gen1 Gen2 Gen3 Configure PCIe Speed. Hot Plug Disabled Optimal Default, Failsafe Default Enabled PCI Express Hot Plug Enable/Disable.

[Page 55](#) Options Summary PCI Express Hot Plug Enable/Disable. PCI Express 5 Disable Enable Optimal Default, Failsafe Default Control the PCI Express Root Port. PCIe Speed Auto Optimal Default, Failsafe Default Gen1 Gen2 Gen3 Configure PCIe Speed. Hot Plug Disabled Optimal Default, Failsafe Default Enabled PCI Express Hot Plug Enable/Disable.

[Page 56: Storage Configuration](#)

3.5.2 Storage Configuration Options Summary SATA Controller(s) Enabled Optimal Default, Failsafe Default Disabled Enable/Disable SATA Device. Port 0 Disabled Enabled Optimal Default, Failsafe Default Enable or Disable SATA Port. Hot Plug Disabled Optimal Default, Failsafe Default Enabled Designates this port as Hot Pluggable. Chapter 3 -...

[Page 57](#) SATA Device Type Hard Disk Drive Optimal Default, Failsafe Default Solid State Drive Identify the SATA port is connected to Solid State Drive or Hard Disk Drive. Port 1 Disabled Enabled Optimal Default, Failsafe Default Enable or Disable SATA Port. Hot Plug Disabled Optimal Default, Failsafe Default...

[Page 58: Nvme Configuration](#)

3.5.3 NVMe Configuration Chapter 3 - AMI BIOS Setup...

[Page 59: Vmd Setup Menu](#)

3.5.4 VMD Setup Menu Options Summary Enable VMD Disabled Optimal Default, Failsafe Default controller Enabled Enable/Disable to VMD controller. Chapter 3 - AMI BIOS Setup...

[Page 60: Hd Audio Configuration](#)

3.5.5 HD Audio Configuration Options Summary HD Audio Disabled Optimal Default, Failsafe Default Enabled Control Detection of the HD-Audio device. Disabled = HDA will be unconditionally disabled. Enabled = HDA will be unconditionally enabled. Chapter 3 - AMI BIOS Setup...

[Page 61: Digital Io Port Configuration](#)

3.5.6 Digital IO Port Configuration Options Summary DIO 1-4 Input Optimal Default, Failsafe Default Output Set DIO as Input or Output. DIO 1-5 Input Optimal Default, Failsafe Default Output Set DIO as Input or Output. Output Level Optimal Default, Failsafe Default High Set output level when DIO pin is output.

[Page 62: Legacy Logical Devices Configuration](#)

3.5.7 Legacy Logical Devices Configuration Chapter 3 - AMI BIOS Setup...

[Page 63: Serial Port 1 Configuration](#)

3.5.7.1 Serial Port 1 Configuration Options Summary Use This Device Disabled Optimal Default, Failsafe Default Enabled Enable or Disable this Logical Device. Possible: Use Automatic Settings Optimal Default, Failsafe Default IO=3F8h; IRQ=4; DMA; IO=2C8h; IRQ=11; DMA; Allows the user to change the device resource settings. New settings will be reflected on this setup page after system restarts.

[Page 64: Serial Port 2 Configuration](#)

3.5.7.2 Serial Port 2 Configuration Options Summary Use This Device Disabled Optimal Default, Failsafe Default Enabled Enable or Disable this Logical Device. Possible: Use Automatic Settings Optimal Default, Failsafe Default IO=2F8h; IRQ=3 DMA; IO=2D8h; IRQ=10; DMA; Allows the user to change the device resource settings. New settings will be reflected on this setup page after system restarts.

[Page 65: Serial Port Console Redirection](#)

3.5.8 Serial Port Console Redirection Options Summary Console Redirection Disabled Optimal Default, Failsafe Default Enabled Console Redirection Enable or Disable. Chapter 3 – AMI BIOS Setup...

[Page 66: Setup Submenu: Security](#)

Setup Submenu: Security Change Administrator/User Password You can set an Administrator password. If you set an Administrator password, you can then set a User password. User passwords do not have access to many of the features in the Setup utility. Select the password you want to set and press <Enter>.

[Page 67: Secure Boot](#)

3.6.1 Secure Boot Options Summary Secure Boot Disabled Optimal Default, Failsafe Default Enabled Secure Boot feature is Active if Secure Boot is Enabled, Platform Key (PK) is enrolled and the System is in User mode. The mode change requires platform reset Secure Boot Mode Standard Custom...

[Page 68: Key Management](#)

3.6.1.1 Key Management Options Summary Factory Key Provision Disabled Optimal Default, Failsafe Default Enabled Install factory default Secure Boot keys after the platform reset and while the System is in Setup mode Chapter 3 – AMI BIOS Setup...

[Page 69: Trusted Computing](#)

3.6.2 Trusted Computing Options Summary Security Device Disable Optimal Default, Failsafe Default Support Enable Enables or Disables BIOS support for security device. O.S. will not show Security Device. TGU EFI protocol and INT1A interface will not be available. SHA-1 PCR Bank Disabled Optimal Default, Failsafe Default Enabled...

[Page 70](#) Options Summary Pending operation None Optimal Default, Failsafe Default TPM Clear Schedule an Operation for the Security Device. Note: Your Computer will reboot during restart in order to change State of Security Device. Platform Hierarchy Disabled Enabled Optimal Default, Failsafe Default Enable or Disable Platform Hierarchy.

[Page 71: Setup Submenu: Boot](#)

Setup Submenu: Boot Options Summary Quiet Boot Disabled Enabled Optimal Default, Failsafe Default Enables or Disables Quiet Boot option. Network Stack Disabled Optimal Default, Failsafe Default UEFI Enable/Disable UEFI Network Stack. Chapter 3 – AMI BIOS Setup...

[Page 72: Setup Submenu: Save & Exit](#)

Setup Submenu: Save & Exit Chapter 3 – AMI BIOS Setup...

[Page 73: Chapter 4 - Drivers Installation](#)

Chapter 4 Chapter 4 – Drivers Installation...

[Page 74: Drivers Download And Installation](#)

Drivers Download and Installation Drivers for the COM-TGHB6 can be downloaded from the product page on the AAEON website by following this link: <https://www.aaeon.com/en/p/com-express-cpu-modules-com-tghb6> Download the driver(s) you need and follow the steps below to install them. Audio Driver (Windows 10) Open the folder where you unzipped the Audio Drivers Run the Setup.exe in the folder Follow the instructions...

[Page 75](#) LAN Drivers (Windows 10) Open the folder where you unzipped the LAN Drivers Read the ReadMe.txt file before proceeding. Caution: Be sure to install the driver package before installing the Intel® PROSet package. Open the Wired_driver_26.3_x64 folder Run the Wired_driver_26.3_x64.exe file in the folder Follow the instructions, drivers will be installed automatically.

[Page 76: Appendix A - I/O Information](#)

Appendix A Appendix A - I/O Information...

[Page 77: I/O Address Map](#)

I/O Address Map Appendix A - I/O Information...

[Page 78: A.2 Memory Address Map](#)

A.2 Memory Address Map Appendix A - I/O Information...

[Page 79: A.3 Large Memory Address Map](#)

A.3 Large Memory Address Map Appendix A - I/O Information...

[Page 80: A.4 Irq Mapping Chart](#)

A.4 IRQ Mapping Chart Appendix A - I/O Information...

[Page 81](#) Appendix A - I/O Information...

[Page 82](#) Appendix A - I/O Information...

[Page 83](#) Appendix A - I/O Information...

[Page 84](#) Appendix A - I/O Information...

[Page 85](#) Appendix A - I/O Information...

[Page 86](#) Appendix A - I/O Information...

[Page 87](#) Appendix A - I/O Information...

[Page 88](#) Appendix A - I/O Information...