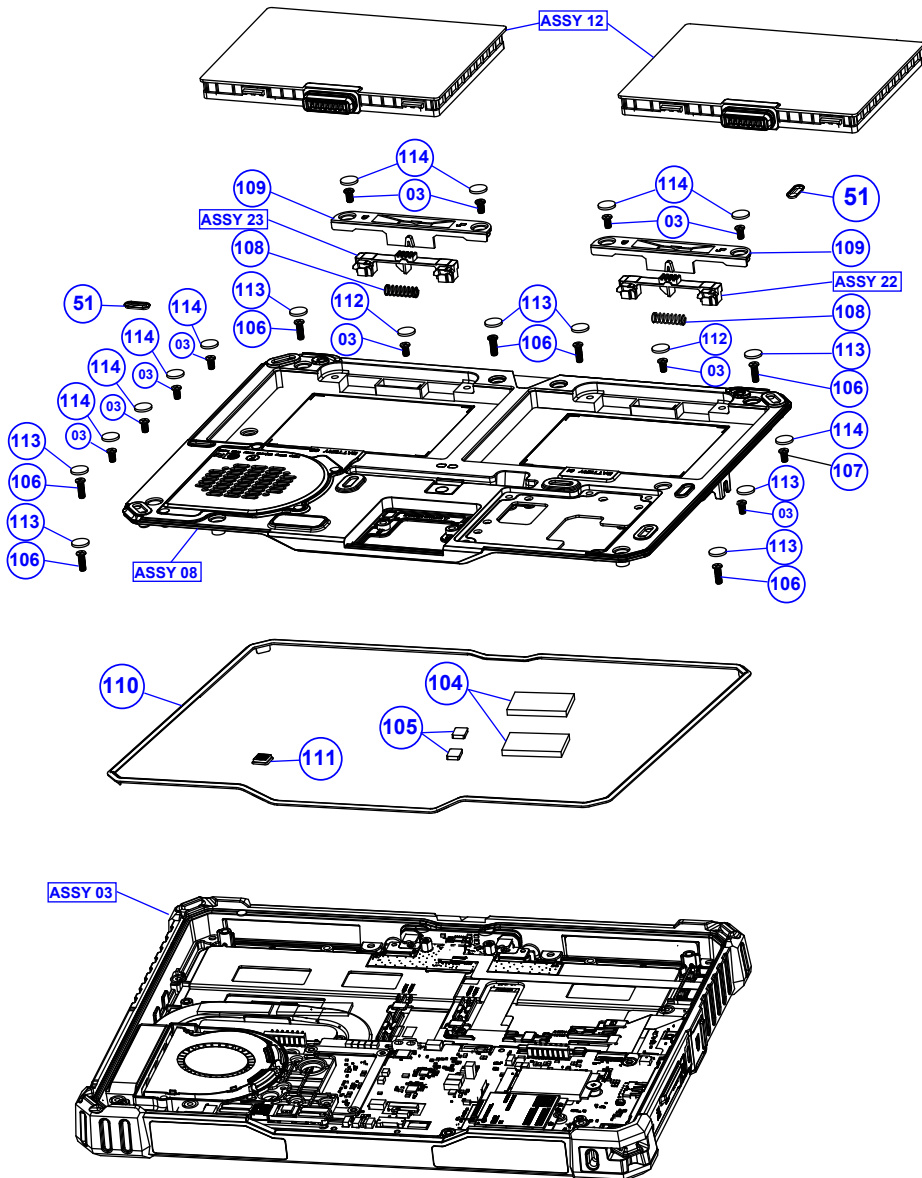


ITEM	Description	Part No.	Q'ty
03	Fillister Head Screw #2/M3x0.5Px4mm	82-272-30004018	5
51	MH-T01T Back Cover Rubber Foot	30-004-24100536	6
75	MH-T01T Extension 1 Cover Rubber Foot (ϕ 5.2x1)	90-004-01200536	5
76	MH-T01T Fan Cover Rubber Foot (ϕ 4.2x0.5)	90-004-01100536	2
106	Fillister Head Screw 2/ M3x0.5Px8mm	22-272-30008018	2
114	MH-T01T Back Cover Rubber Foot	30-013-01700536	2
115	MH-T01T Extension 1 Cover Without Function (w/Paint Cool Gray 10C)	20-004-34064536	1
116	MH-T01T Extension 2 Cover Without Function (w/Paint Cool Gray 10C)	30-002-12101536	1
117	MH-T01T Stylus Spring,100mm	35-001-00001536	1
118	MH-T01T Dual-Pen Stylus, 90mm	35-002-00001536	1
119	MH-T01T Metal Strap 01	34-033-05501536	2
120	MH-T01T Metal Strap 02	34-033-05502536	2
121	MH-T01T Hand Strap(with Rotation and Stand)	34-033-04301536	1
122	MH-T01T Shoulder Strap	34-033-02201536	1
123	SPRING WASHER (Black) (OD= ϕ 5mm,ID= ϕ 3.2mmx0.8T)	23-205-30010501	4
124	ROUND HEAD SCREW M3x0.5Px8mm	22-235-30008311	10
125	ROUND HEAD SCREW M3x0.5Px10mm	22-235-30010011	2
126	WASHER(OD= ϕ 10mm,ID= ϕ 3.2mmx0.5T)	23-315-30050101	2
127	90W AC to DC 19V/4.73A Power Adapter	52-002-04395302	1
128	Power Cord Cable L=1.83M	27-013-00024111	1
	ASSY 02 (MH-T01T System Assembly 02)		1
	ASSY 27 (Barcode Scanner Module)		1
	ASSY 28 (LAN Module)		1
	ASSY 29 (RS-232 Module)		1
	ASSY 30 (USB Module)		1
	ASSY 31 (MicroSD Card Slot Module)		1
	ASSY 32 (Battery Charger Module)		1
	ASSY 33 (3D Camera Module)		1
127-01	65W AC to DC 19V/3.42A Power Adapter	52-002-09173302	1

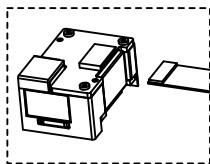
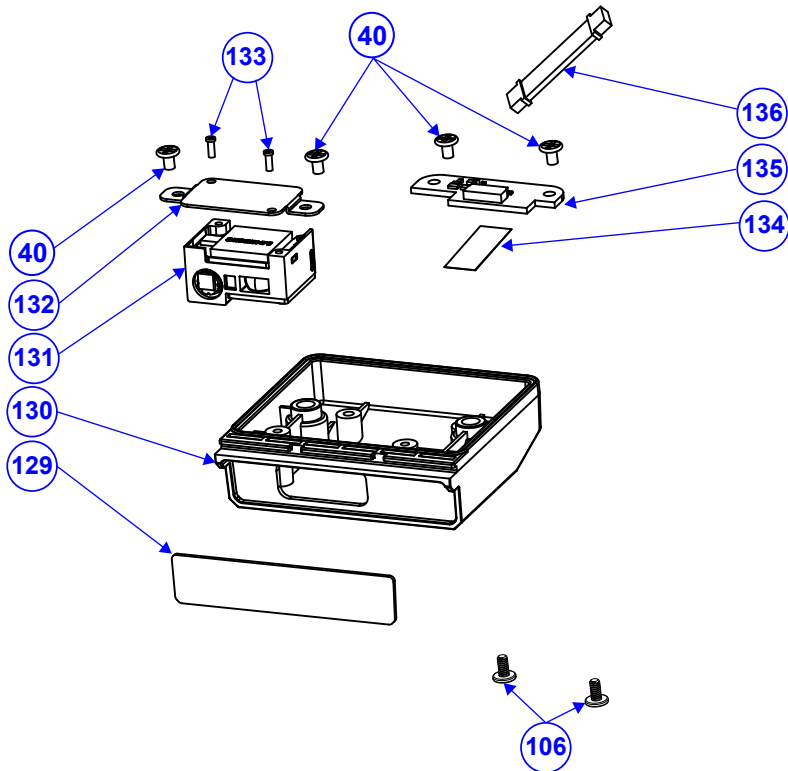
Optional Accessories Assembly Exploded Diagram (2)



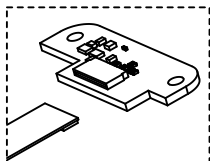
(to be continued)

ITEM	Description	Part No.	Q'ty
03	Fillister Head Screw #2 / M3x0.5Px4mm	82-272-30004018	11
51	MH-T01T Back Cover Rubber Foot	30-004-24100536	2
104	MH-T01T SSD Thermal Pad (32x20x1mm)	21-006-03220001	2
105	MH-T01T PD Controller Thermal Pad (6.5x6.5x1mm)	21-006-06565001	2
106	Fillister Head Screw #2 / M3x0.5Px8mm	22-272-30008018	7
107	Fillister Head Screw #2 / M3x0.5Px6mm	22-272-30006018	1
108	MH-T01T Compression Spring (ϕ 4.8x15.5)	83-000-00000162	2
109	MH-T01T Battery Latch Cover (Cool Gray 10C)	30-002-12100536	2
110	MH-T01T SI Packing Ring (Black)	30-013-01108536	1
111	MH-T01T Rear Side Camera Lens (Transparent)	30-021-01330536	1
112	MH-T01T Back Cover Rubber Foot (ϕ 6.5x1)	90-004-01300536	2
113	MH-T01T Back Cover Rubber Foot (ϕ 7.7x1)	90-004-01400536	8
114	MH-T01T Back Cover Rubber Foot	30-013-01700536	9
	ASSY 23 (Battery Pack Push Button Assembly 02)		1
	ASSY 22 (Battery Pack Push Button Assembly 01)		1
	ASSY 12 (Battery Pack Assembly)		2
	ASSY 08 (Back Cover Assembly 01)		1
	ASSY 03 (MH-T01T System Assembly 03)		1

Barcode Scanner Module Assembly Exploded Diagram



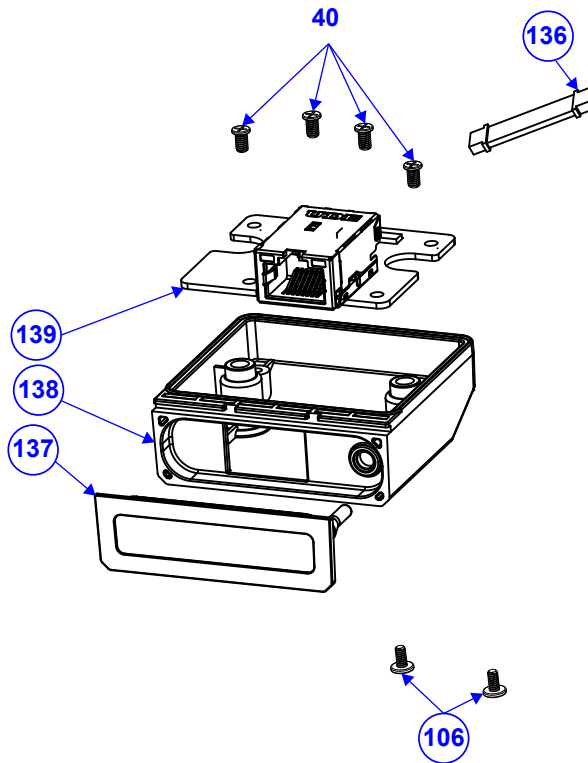
Before you insert the cable into Barcode N4680 module, make sure the cable PAD (blue) part is facing upwards (as shown).



Before you insert the cable into barcode module board, make sure the cable PAD (blue) part is facing downwards (as shown).

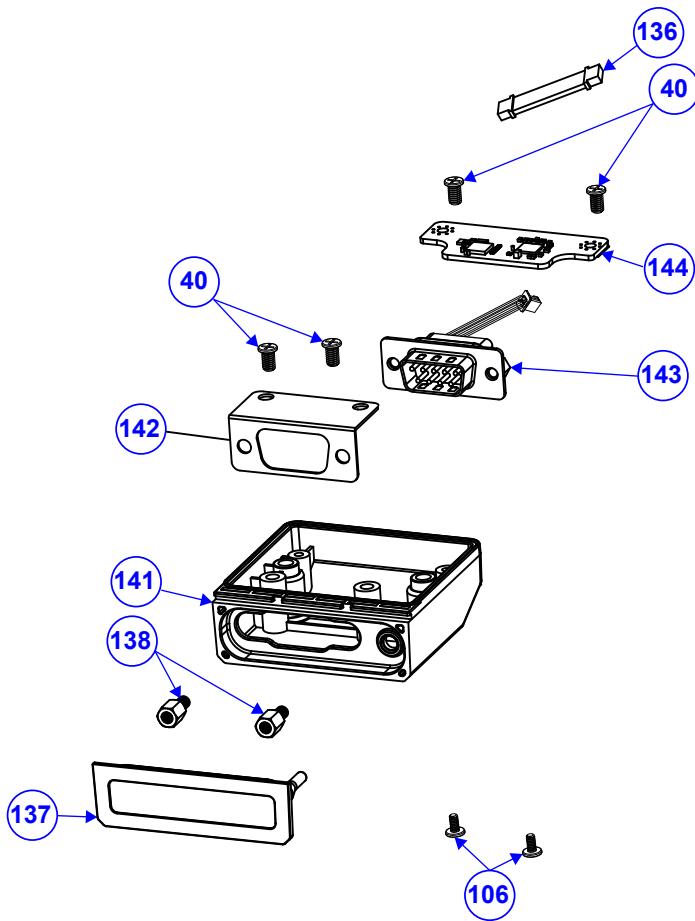
ITEM	Description	Part No.	Q'ty
40	Fillister Head Screw #1 / M2x0.4Px4mm	22-272-20004011	4
106	Fillister HEAD SCREW #2 / M3x0.5Px8mm	22-272-30008018	2
129	MH-T01T Barcode Scanner Lens (Print Black)	30-021-02300536	1
130	MH-T01T Extension 2 Cover For Barcode Scanner (Cool Gray 10C)	30-002-12500536	1
131	Compact Integrate Decoded 2D Engine	52-380-46800111	1
132	MH-T01T Barcode Scanner Holding Metal	20-206-01001536	1
133	Pan Head Screw #0/T1.4x3mm	22-122-14003011	2
134	MH-5100 FPC Cable For Barcode Sacnner-2 Pitch=0.5mm Pin=12 L=35mm	27-000-37801093	1
135	HSF, Barcode scanner USB type for MH-T01T	MR-T01T-G0B-06N	1
136	Expansion USB To Multiple Function Cable (20P/0.5P/GOLD to 20P/0.5P/GOLD) L=25mm	27-043-53601031	1

LAN Module Assembly Exploded Diagram



ITEM	Description	Part No.	Q'ty
40	Fillister Head Screw #1 / M2x0.4Px4mm	22-272-20004011	4
106	Fillister HEAD SCREW #2 / M3x0.5Px8mm	22-272-30008018	2
136	Expansion USB To Multiple Function Cable (20P/0.5P/GOLD to 20P/0.5P/GOLD) L=25mm	27-043-53601031	1
137	MH-T01T Extension 2 Cover Door For RS232	30-007-24400536	1
138	MH-T01T Extension 2 Cover For RJ45 (Cool Gray 10C)	30-002-12600536	1
139	HSF, Giga LAN RJ45 port for MH-T01T	MR-T01T-G0A-51N	1

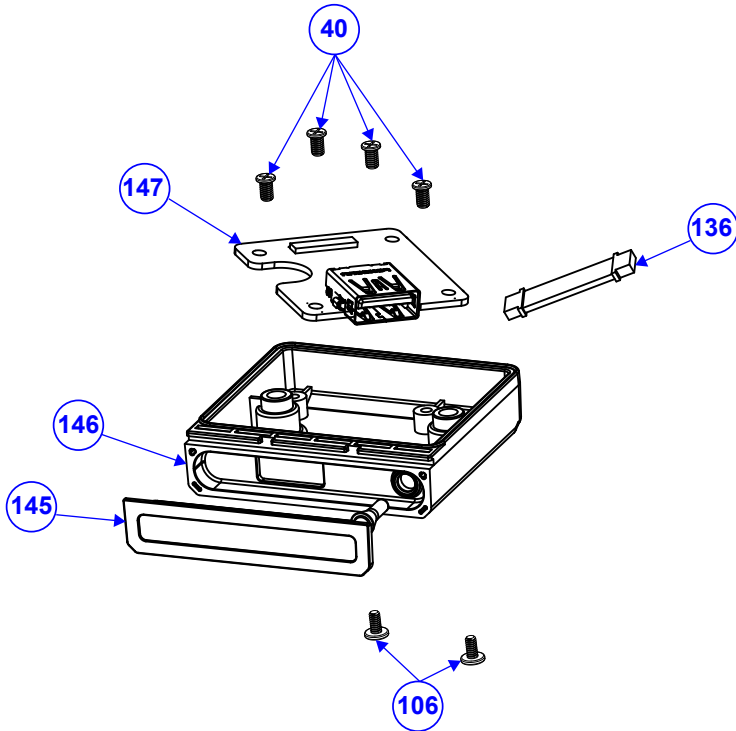
RS-232 Module Assembly Exploded Diagram



ITEM	Description	Part No.	Q'ty
40	Fillister Head Screw #1 / M2x0.4Px4mm	22-272-20004011	4
106	Fillister HEAD SCREW #2 / M3x0.5Px8mm	22-272-30008018	2
136	Expansion USB To Multiple Function Cable (20P/0.5P/GOLD to 20P/0.5P/GOLD) L=25mm	27-043-53601031	1

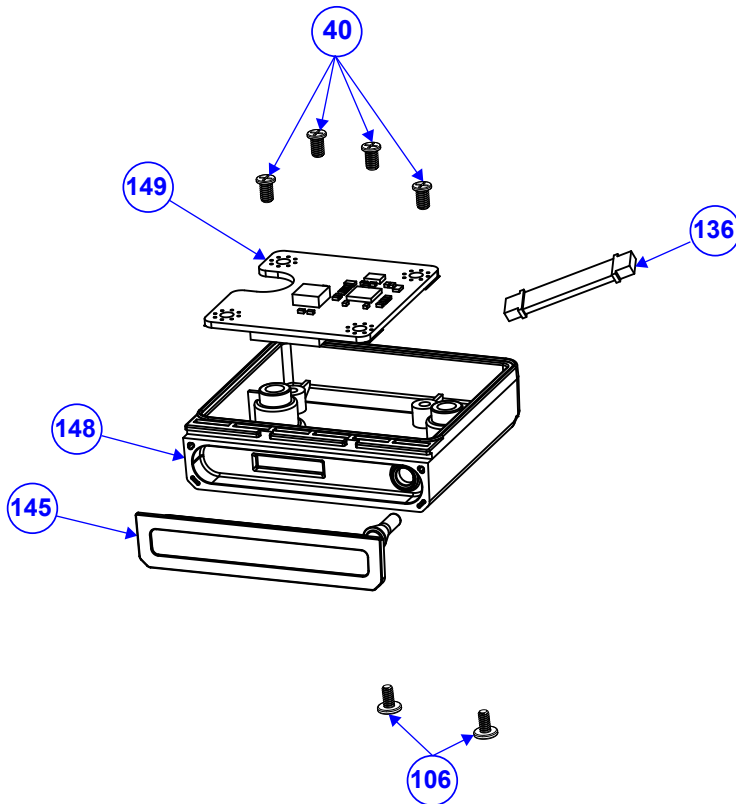
ITEM	Description	Part No.	Q'ty
137	MH-T01T Extension 2 Cover Door For RS232	30-007-24400536	1
138	HEX CU BOSS UNC No.4-40,L=4.8,H=7mm	22-692-40048051	2
141	MH-T01T Extension 2 Cover For RJ45 (Cool Gray 10C)	30-002-12600536	1
142	MH-T01T RS232 Connector Metal	20-206-07004536	1
143	D-SUB Cable (9M to 10F/P0.8/TIN) (Blue) L=40mm	27-031-53601031	1
144	HSF, RS232 DB9 for MH-T01T	MR-T01T-G0B-31N	1

USB 3.0 Type A Module Assembly Exploded Diagram



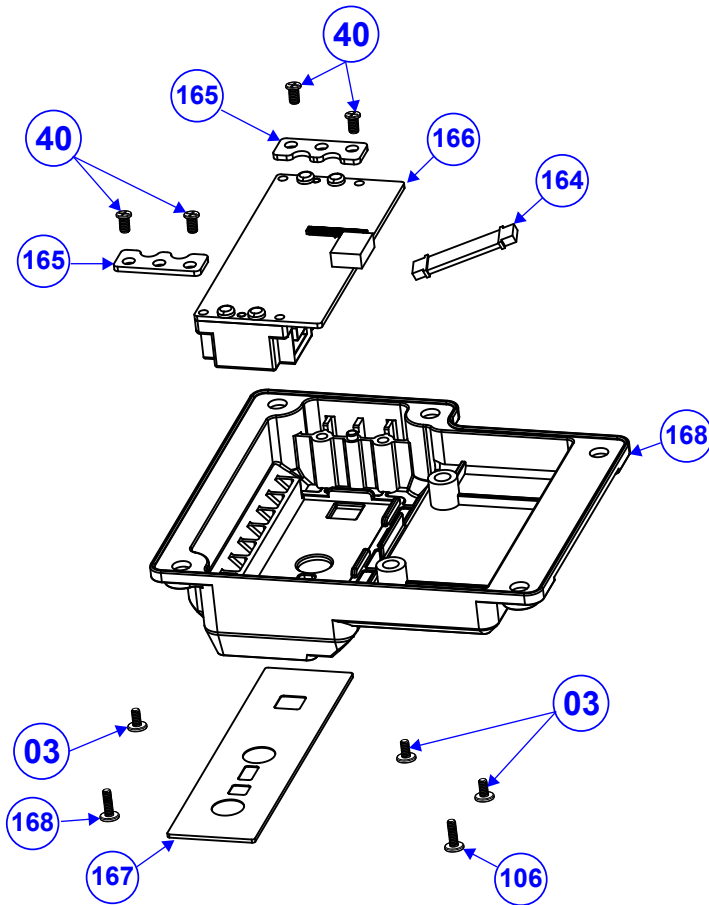
ITEM	Description	Part No.	Q'ty
40	Fillister Head Screw #1 / M2x0.4Px4mm	22-272-20004011	4
106	Fillister HEAD SCREW #2 / M3x0.5Px8mm	22-272-30008018	2
136	Expansion USB To Multiple Function Cable (20P/0.5P/GOLD to 20P/0.5P/GOLD) L=25mm	27-043-53601031	1
145	MH-T01T Extension 2 Cover Door For Micro-SD	30-007-24300536	1
146	MH-T01T Extension 2 Cover For USB Type-A (Cool Gray 10C)	30-002-12900536	1
147	HSF, USB 3.0 type-A for MH-T01T	MR-T01T-G0A-41N	1

MicroSD Card Slot Module Assembly Exploded Diagram



ITEM	Description	Part No.	Q'ty
40	Fillister Head Screw #1 / M2x0.4Px4mm	22-272-20004011	4
106	Fillister HEAD SCREW #2 / M3x0.5Px8mm	22-272-30008018	2
136	Expansion USB To Multiple Function Cable (20P/0.5P/GOLD to 20P/0.5P/GOLD) L=25mm	27-043-53601031	1
145	MH-T01T Extension 2 Cover Door For Micro-SD	30-007-24300536	1
148	MH-T01T Extension 2 Cover For Micro-SD (Cool Gray 10C)	30-002-12700536	1
149	HSF, Micro SD card USB type for MH-T01T	MR-T01T-G0B-71N	1

3D Camera Module Assembly Exploded Diagram

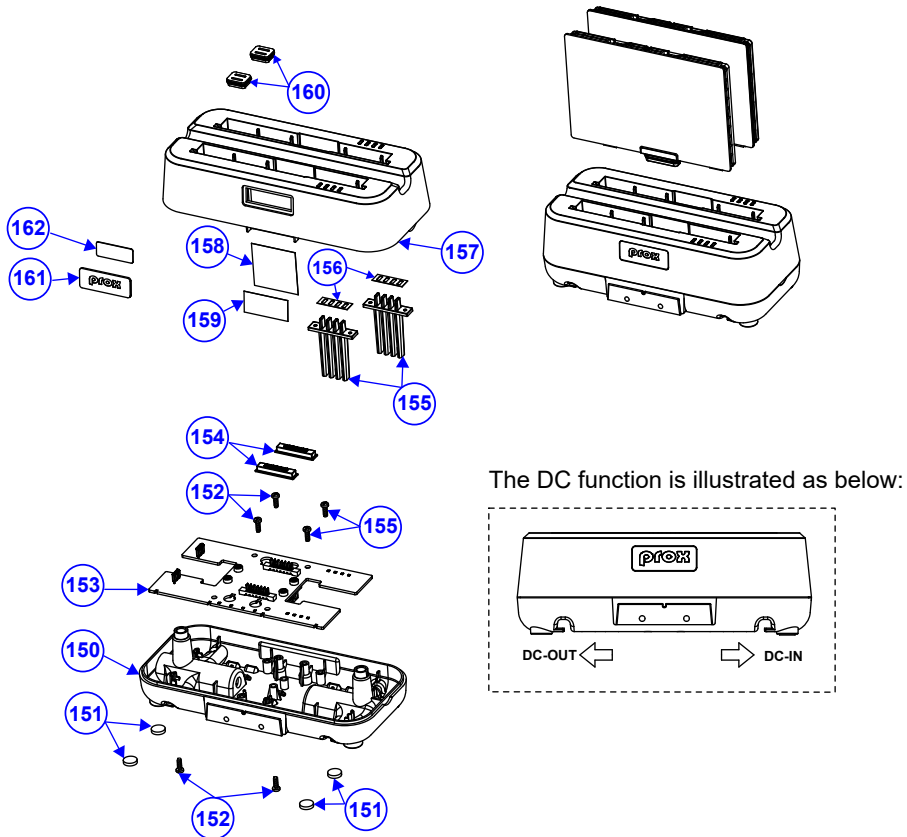


ITEM	Description	Part No.	Q'ty
03	Fillister Head Screw #2/M3x0.5Px4mm	82-272-30004018	3
40	Fillister Head Screw #1 / M2x0.4Px4mm	22-272-20004011	4
106	Fillister HEAD SCREW #2 / M3x0.5Px8mm	22-272-30008018	2
164	Expansion For Usb Smart Card Reader Cable (Micro USB to 5F/P1.0/TIN) L=65mm	27-006-53602071	1
165	MH-T01T 3D Camera Holding Metal	20-206-07005536	2

Appendix A System Diagrams

ITEM	Description	Part No.	Q'ty
166	3D Camera High Accuracy Structured Light Camera with USB Interface	52-151-08021047	1
167	MH-T01T 3D Camera Lens (Print Black)	30-021-02400536	1
168	3D Camera Cover	N/A	2

Battery Charger Assembly Exploded Diagram



ITEM	Description	Part No.	Q'ty
150	MH-5100 Battery Charger Bottom (Black)	30-001-12110378	1
151	Rubber Foot (Φ9x2.5mm) (Black)	90-004-06600000	4
152	Pan Head Screw 2/T3.0x8mm(Black)	22-122-30080011	6
153	HSF, Charger stand with 2 battery slot, LED indicator	MR-T01T-G1A-D1N	1
154	MH-T01T Pin Cover	30-013-01109536	2
155	MH-T01T Battery Charger Lens (Black)	30-021-02430536	2
156	MH-T01T Battery Lens Tape	34-017-06401536	2
157	MH-T01T Battery Charger Top (Black)	30-002-12130536	1
158	MH-T01T AL FOIL-A (Silver) (32x32mm)	34-017-07101536	1

ITEM	Description	Part No.	Q'ty
159	MH-T01T AL FOIL-B (Silver) (32x15mm)	34-017-07102536	1
160	MH-T01T USB Door	30-013-01201536	2
161	MH-T01T Logo Lens (Black)	34-017-02102536	1
162	MH-T01T Logo Base (White)	34-017-02101536	1

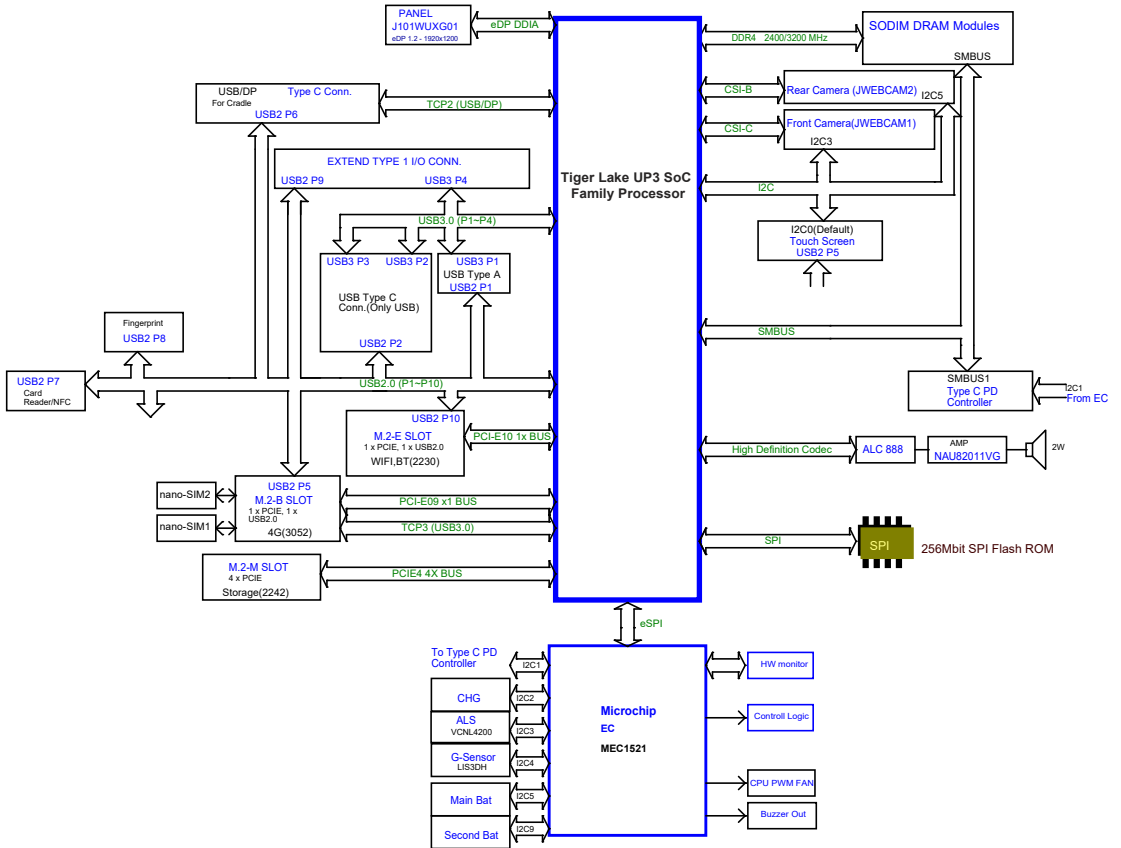
Appendix B Technical Summary

This appendix will give you a brief introduction of the allocation maps for MH-T01T system resources and guide you how to enter the Battery Shipping Mode.

In addition, it also describes the common problems that you may encounter when you use MH-T01T tablet for general operations as well as scanning barcodes and provide the corresponding solutions.

- Block Diagram
- Interrupt Map
- I/O Map
- Memory Map
- Flash BIOS Update
- Battery Shipping Mode Instructions
- Common Troubleshooting Solutions
- Barcode Troubleshooting Solutions

Block Diagram



Interrupt Map

IRQ	ASSIGNMENT
IRQ 0	System timer
IRQ 3	Communications Port (COM2)
IRQ 4	Communications Port (COM1)
IRQ 14	Intel(R) Serial IO GPIO Host Controller - INT34C5
IRQ 16	Intel(R) Serial IO UART Host Controller - A0A8
IRQ 16	High Definition Audio Controller
IRQ 17	USB Synopsys Controller
IRQ 18	Intel(R) Serial IO I2C Host Controller - A0D8
IRQ 37	Intel(R) Serial IO SPI Host Controller - A0AB
IRQ 54	Microsoft ACPI-Compliant System
IRQ 55	Microsoft ACPI-Compliant System
IRQ 56	Microsoft ACPI-Compliant System
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IRQ	ASSIGNMENT
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IRQ 401	Microsoft ACPI-Compliant System
IRQ 402	Microsoft ACPI-Compliant System
IRQ 403	Microsoft ACPI-Compliant System
IRQ 404	Microsoft ACPI-Compliant System
IRQ 405	Microsoft ACPI-Compliant System
IRQ 406	Microsoft ACPI-Compliant System
IRQ 407	Microsoft ACPI-Compliant System
IRQ 408	Microsoft ACPI-Compliant System

IRQ	ASSIGNMENT
IRQ 409	Microsoft ACPI-Compliant System
IRQ 410	Microsoft ACPI-Compliant System
IRQ 411	Microsoft ACPI-Compliant System
IRQ 412	Microsoft ACPI-Compliant System
IRQ 413	Microsoft ACPI-Compliant System
IRQ 414	Microsoft ACPI-Compliant System
IRQ 415	Microsoft ACPI-Compliant System
IRQ 416	Microsoft ACPI-Compliant System
IRQ 417	Microsoft ACPI-Compliant System
IRQ 418	Microsoft ACPI-Compliant System
IRQ 419	Microsoft ACPI-Compliant System
IRQ 420	Microsoft ACPI-Compliant System
IRQ 421	Microsoft ACPI-Compliant System
IRQ 422	Microsoft ACPI-Compliant System
IRQ 423	Microsoft ACPI-Compliant System
IRQ 424	Microsoft ACPI-Compliant System
IRQ 425	Microsoft ACPI-Compliant System
IRQ 426	Microsoft ACPI-Compliant System
IRQ 427	Microsoft ACPI-Compliant System
IRQ 428	Microsoft ACPI-Compliant System
IRQ 429	Microsoft ACPI-Compliant System
IRQ 430	Microsoft ACPI-Compliant System
IRQ 431	Microsoft ACPI-Compliant System
IRQ 432	Microsoft ACPI-Compliant System
IRQ 433	Microsoft ACPI-Compliant System
IRQ 434	Microsoft ACPI-Compliant System
IRQ 435	Microsoft ACPI-Compliant System
IRQ 436	Microsoft ACPI-Compliant System
IRQ 437	Microsoft ACPI-Compliant System
IRQ 438	Microsoft ACPI-Compliant System
IRQ 439	Microsoft ACPI-Compliant System
IRQ 440	Microsoft ACPI-Compliant System
IRQ 441	Microsoft ACPI-Compliant System
IRQ 442	Microsoft ACPI-Compliant System
IRQ 443	Microsoft ACPI-Compliant System
IRQ 444	Microsoft ACPI-Compliant System

IRQ	ASSIGNMENT
IRQ 445	Microsoft ACPI-Compliant System
IRQ 446	Microsoft ACPI-Compliant System
IRQ 447	Microsoft ACPI-Compliant System
IRQ 448	Microsoft ACPI-Compliant System
IRQ 449	Microsoft ACPI-Compliant System
IRQ 450	Microsoft ACPI-Compliant System
IRQ 451	Microsoft ACPI-Compliant System
IRQ 452	Microsoft ACPI-Compliant System
IRQ 453	Microsoft ACPI-Compliant System
IRQ 454	Microsoft ACPI-Compliant System
IRQ 455	Microsoft ACPI-Compliant System
IRQ 456	Microsoft ACPI-Compliant System
IRQ 457	Microsoft ACPI-Compliant System
IRQ 458	Microsoft ACPI-Compliant System
IRQ 459	Microsoft ACPI-Compliant System
IRQ 460	Microsoft ACPI-Compliant System
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IRQ 468	Microsoft ACPI-Compliant System
IRQ 469	Microsoft ACPI-Compliant System
IRQ 470	Microsoft ACPI-Compliant System
IRQ 471	Microsoft ACPI-Compliant System
IRQ 472	Microsoft ACPI-Compliant System
IRQ 473	Microsoft ACPI-Compliant System
IRQ 474	Microsoft ACPI-Compliant System
IRQ 475	Microsoft ACPI-Compliant System
IRQ 476	Microsoft ACPI-Compliant System
IRQ 477	Microsoft ACPI-Compliant System
IRQ 478	Microsoft ACPI-Compliant System

IRQ	ASSIGNMENT
IRQ 479	Microsoft ACPI-Compliant System
IRQ 480	Microsoft ACPI-Compliant System
IRQ 481	Microsoft ACPI-Compliant System
IRQ 482	Microsoft ACPI-Compliant System
IRQ 483	Microsoft ACPI-Compliant System
IRQ 484	Microsoft ACPI-Compliant System
IRQ 485	Microsoft ACPI-Compliant System
IRQ 486	Microsoft ACPI-Compliant System
IRQ 487	Microsoft ACPI-Compliant System
IRQ 488	Microsoft ACPI-Compliant System
IRQ 489	Microsoft ACPI-Compliant System
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IRQ 492	Microsoft ACPI-Compliant System
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IRQ 497	Microsoft ACPI-Compliant System
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IRQ 501	Microsoft ACPI-Compliant System
IRQ 502	Microsoft ACPI-Compliant System
IRQ 503	Microsoft ACPI-Compliant System
IRQ 504	Microsoft ACPI-Compliant System
IRQ 505	Microsoft ACPI-Compliant System
IRQ 506	Microsoft ACPI-Compliant System
IRQ 507	Microsoft ACPI-Compliant System
IRQ 508	Microsoft ACPI-Compliant System
IRQ 509	Microsoft ACPI-Compliant System
IRQ 510	Microsoft ACPI-Compliant System
IRQ 511	Microsoft ACPI-Compliant System
IRQ 4294967283	Intel(R) Management Engine Interface #1
IRQ 4294967284	Intel(R) Ethernet Connection (13) I219-V
IRQ 4294967285	Intel(R) USB 3.10 eXtensible Host Controller - 1.20

IRQ	ASSIGNMENT
	(Microsoft)
IRQ 4294967286	Intel(R) USB 3.10 eXtensible Host Controller - 1.20 (Microsoft)
IRQ 4294967287	Intel(R) UHD Graphics
IRQ 4294967288	Standard SATA AHCI Controller
IRQ 4294967289	Standard NVM Express Controller
IRQ 4294967290	Standard NVM Express Controller
IRQ 4294967291	Standard NVM Express Controller
IRQ 4294967292	Standard NVM Express Controller
IRQ 4294967293	Standard NVM Express Controller
IRQ 4294967294	Intel(R) PEG60 - 9A09

Note: These resource information were gathered using Windows 10 (the IRQ could be assigned differently depending on OS)

I/O Map

I/O	ASSIGNMENT
0x00000000-0x00000CF7	PCI Express Root Complex
0x00000020-0x00000021	Programmable interrupt controller
0x00000024-0x00000025	Programmable interrupt controller
0x00000028-0x00000029	Programmable interrupt controller
0x0000002C-0x0000002D	Programmable interrupt controller
0x0000002E-0x0000002F	Motherboard resources
0x00000030-0x00000031	Programmable interrupt controller
0x00000034-0x00000035	Programmable interrupt controller
0x00000038-0x00000039	Programmable interrupt controller
0x0000003C-0x0000003D	Programmable interrupt controller
0x00000040-0x00000043	System timer
0x0000004E-0x0000004F	Motherboard resources
0x00000050-0x00000053	System timer
0x00000061-0x00000061	Motherboard resources
0x00000063-0x00000063	Motherboard resources
0x00000065-0x00000065	Motherboard resources
0x00000067-0x00000067	Motherboard resources
0x00000070-0x00000070	Motherboard resources
0x00000080-0x00000080	Motherboard resources
0x00000092-0x00000092	Motherboard resources
0x000000A0-0x000000A1	Programmable interrupt controller
0x000000A4-0x000000A5	Programmable interrupt controller
0x000000A8-0x000000A9	Programmable interrupt controller
0x000000AC-0x000000AD	Programmable interrupt controller
0x000000B0-0x000000B1	Programmable interrupt controller
0x000000B2-0x000000B3	Motherboard resources
0x000000B4-0x000000B5	Programmable interrupt controller
0x000000B8-0x000000B9	Programmable interrupt controller
0x000000BC-0x000000BD	Programmable interrupt controller
0x000002F8-0x000002FF	Communications Port (COM2)
0x000003F8-0x000003FF	Communications Port (COM1)
0x000004D0-0x000004D1	Programmable interrupt controller
0x00000680-0x0000069F	Motherboard resources
0x00000A00-0x00000A0F	Motherboard resources

I/O	ASSIGNMENT
0x00000A10-0x00000A1F	Motherboard resource
0x00000A20-0x00000A2F	Motherboard resources
0x00000D00-0x0000FFFF	PCI Express Root Complex
0x0000164E-0x0000164F	Motherboard resources
0x00001800-0x000018FE	Motherboard resources
0x00001854-0x00001857	Motherboard resources
0x00002000-0x000020FE	Motherboard resources
0x00003000-0x0000303F	Intel(R) UHD Graphics
0x00003060-0x0000307F	Standard SATA AHCI Controller
0x00003080-0x00003083	Standard SATA AHCI Controller
0x00003090-0x00003097	Standard SATA AHCI Controller
0x0000EFA0-0x0000EFBF	Intel(R) SMBus - A0A3

Memory Map

MEMORY MAP	ASSIGNMENT
0xFEDC0000-0xFEDC7FFF	Motherboard resources
0xFEDA0000-0xFEDA0FFF	Motherboard resources
0xFEDA1000-0xFEDA1FFF	Motherboard resources
0xC0000000-0xCFFFFFFF	Motherboard resources
0xFED20000-0xFED7FFFF	Motherboard resources
0xFED90000-0xFED93FFF	Motherboard resources
0xFED45000-0xFED8FFFF	Motherboard resources
0xFEE00000-0xFEEFFFFFFF	Motherboard resources
0xBF000000-0xBF000000	Intel(R) Ethernet Connection (13) I219-V
0xFFCFCB000-0xFFCFCBFFF	Intel(R) Serial IO UART Host Controller - A0A8
0x1310000-0x131FFFFF	Intel(R) USB 3.10 eXtensible Host Controller - 1.20 (Microsoft)
0xFED00000-0xFED003FF	High precision event timer
0x1300000-0x130FFFFF	Intel(R) USB 3.10 eXtensible Host Controller - 1.20 (Microsoft)
0xFFCFA000-0xFFCFAFFF	Intel(R) Serial IO I2C Host Controller - A0D8
0xFE000000-0xFE01FFFF	Motherboard resources
0xFE04C000-0xFE04FFFF	Motherboard resources
0xFE050000-0xFE0AFFFF	Motherboard resources
0xFE0D0000-0xFE0FFFFF	Motherboard resources
0xFE200000-0xFE7FFFFF	Motherboard resources
0xFF000000-0xFFFFFFFF	Motherboard resources
0xFD000000-0xFD68FFFF	Motherboard resources
0xFD6B0000-0xFD6CFFFF	Motherboard resources
0xFD6F0000-0xFD6FFFFF	Motherboard resources
0x1329000-0x1329FFFF	Intel(R) Serial IO SPI Host Controller - A0AB
0x0000-0xFFFFFFFF	Intel(R) UHD Graphics
0x0000-0xFFFFFFFF	Intel(R) UHD Graphics
0xFE010000-0xFE010FFF	Intel(R) SPI (flash) Controller - A0A4
0xFD6E0000-0xFD6EFFFF	Intel(R) Serial IO GPIO Host Controller - INT34C5
0xFD6D0000-0xFD6DFFFF	Intel(R) Serial IO GPIO Host Controller -

MEMORY MAP	ASSIGNMENT
	INT34C5
0xFD6A0000-0xFD6AFFFF	Intel(R) Serial IO GPIO Host Controller - INT34C5
0xFD690000-0xFD69FFFF	Intel(R) Serial IO GPIO Host Controller - INT34C5
0xFED40000-0xFED44FFF	Trusted Platform Module 2.0
0xFFCF9000-0xFFCF9FFF	Intel(R) Management Engine Interface #1
0xFFCFC000-0xFFCFFFFF	High Definition Audio Controller
0xFFD00000-0xFFDFFFFF	High Definition Audio Controller
0xFFE00000-0xFFFFFFFF	USB Synopsys Controller
0xFFCF8000-0xFFCF8FFF	USB Synopsys Controller
0x1328000-0x13280FF	Intel(R) SMBus - A0A3
0xA0000-0xBFFFF	PCI Express Root Complex
0xE0000-0xE3FFF	PCI Express Root Complex
0xE4000-0xE7FFF	PCI Express Root Complex
0xE8000-0xEBFFF	PCI Express Root Complex
0xEC000-0xEFFFF	PCI Express Root Complex
0xF0000-0xFFFFF	PCI Express Root Complex
0x50400000-0x50403FFF	Standard NVM Express Controller
0x50400000-0x50403FFF	PCI Express Root Complex
0x50400000-0x50403FFF	Intel(R) PEG60 - 9A09
0x50520000-0x50521FFF	Standard SATA AHCI Controller
0x50522000-0x505227FF	Standard SATA AHCI Controller
0x50523000-0x505230FF	Standard SATA AHCI Controller

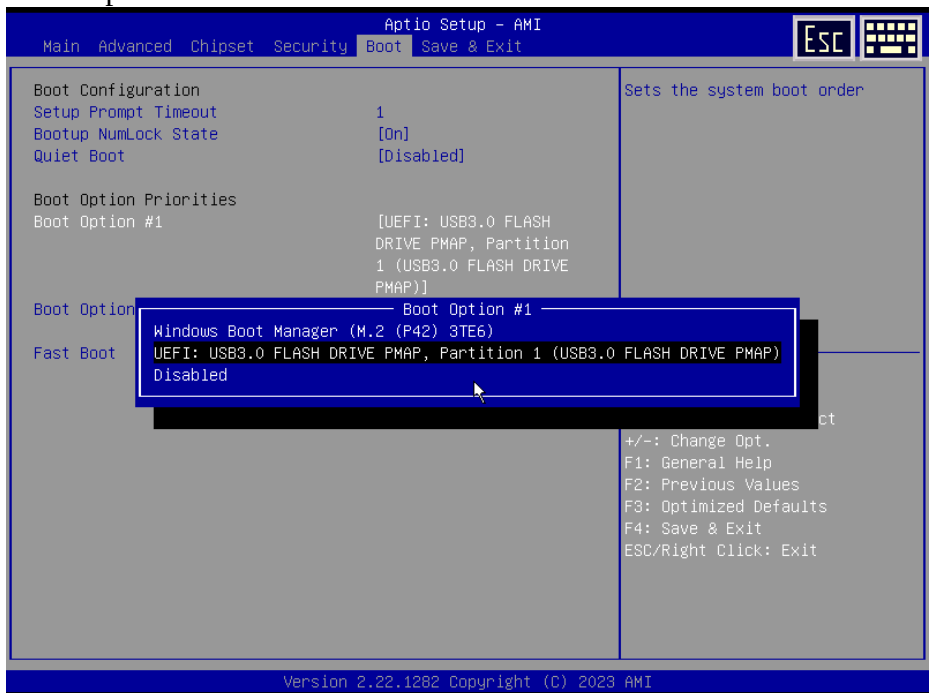
Flash BIOS Update

I. Prerequisites

- 1 Prepare a bootable media (e.g. USB storage device) which can boot system to EFI Shell.

Note: Copy UEFI Shell into the storage device under specific directory path. (/efi/boot/bootx64.efi)

- 2 Download and save the BIOS file (e.g. T01T0PU1.bin) to the storage device.
- 3 Copy AMI flash utility – AfuEfix64.efi (v5.14.01.0015) into bootable device.
- 4 Make sure the target system can first boot to the bootable device.
 - (1) Connect the USB storage device.
 - (2) Turn on the computer and press <ESC> or <DEL> key during boot to enter BIOS Setup.
 - (3) Select **[Boot]** menu and set the USB bootable device to be the 1st boot device.
 - (4) Press <F4> key to save the configuration and exit the BIOS setup menu.



II. AFUEFI Command for System BIOS Update

AfuEfix64.efi is the AMI firmware update utility; the command line is shown as below:

AfuEfix64 <ROM File Name> [option1] [option2]....

Users can type "**AfuEfix64/ ?**" to see all the definition of each control options. The recommended options for BIOS ROM update include following parameters:

- /P:** Program main BIOS image.
- /B:** Program Boot Block.
- /N:** Program NVRAM.
- /X:** Don't check ROM ID.
- /R1:** Keep SMBIOS Type1 data.

III. BIOS Update Procedure

- 1** Use the bootable USB storage to boot up the system into the EFI Shell.
- 2** Type "**AfuEfix64 T01Txxxx.bin /p /b /n /x /r**" and press Enter to start the flash procedure. (xxxx means the BIOS revision part, e.g. 0PM1...)
- 3** During the update procedure, you will see the BIOS update process status and its percentage. Beware! Do not turn off system power or reset your computer if the entire procedure is not completed yet, or it may crash the BIOS ROM and make the system unable to boot up next time.
- 4** After BIOS update procedures is completed, the following messages will be shown:

```

Shell> fs0:

fs0:\afuefix64> AFUEFIx64 T01T0PU1.bin /p /b /n /x /r
+-----+
|               AMI Firmware Update Utility v5.14.01.0015               |
|   Copyright (C) 1985-2019, American Megatrends International LLC.   |
|   All Rights Reserved. Subject to AMI licensing agreement.           |
+-----+
Reading flash ..... done
- ME Data Size Checking. Ok
- FFS checksums ..... ok
- Check RomLayout ..... ok
Erasing Boot Block ..... done
Updating Boot Block ..... done
Verifying Boot Block ..... done
Erasing Main Block ..... done
Updating Main Block ..... done
Verifying Main Block ..... done
Erasing NVRAM Block ..... done
Updating NVRAM Block ..... done
Verifying NVRAM Block ..... done

fs0:\afuefix64>

```

- 5 Restart the system and boot up with the new BIOS configurations.
- 6 The BIOS Update is completed after the system is restarted.
- 7 Reboot the system and verify if the BIOS version shown on the initialization screen has been updated.



Battery Shipping Mode Instructions

Before Entering the Battery Shipping Mode

1. Remove all external power source (ex. AC Adaptor & Type-C Charger).
Note: This function will not work if any power source other than the battery is connected.
2. Verify that the battery is installed and that no warning lights are illuminated.

Entering Battery Shipping Mode

The battery shipping mode function is used for reducing battery consumption by cutting off the current path to the system at its OFF state. Especially, battery powered portable products require this function to suppress the battery power consumption after manufacturing until delivery to the end user. Just before shipping, manufacturers can set the "shipping mode" to cut off the current path with an external MOSFET, and reduce the invalid current and battery power consumption can be largely suppressed.

This shipping mode can be released by connecting an adapter(AC, Type-C).

Enable Battery Shipping Mode Procedure

1. Power on the system and enter the BIOS setup menu.
2. Choose the page [Boot] and enable the item [Battery Shipping Mode]



3. Save and reset the system, and the procedure will start automatically.

During the procedure, you will see the indicator light cyclically flashing (green-> yellow->red->green) until the procedure is finished. (The procedure needs 3~5 seconds.)

Troubleshooting Solutions

Common Troubleshooting Solutions

Item	Solution
No display	1. Please check whether the batter is out of power. If Yes, please try to charge the system with the power adaptor. 2. When the Power LED shows green, please triple-click Display to awake Display. 3. Please make sure the Brightness of Display does not adjust to zero.
Cannot charge	Please make sure the DC plug of the power adaptor has been already plugged into the DC jack correctly.
Speaker no sound	Click setting -> sound -> adjust to volume up.

Barcode Troubleshooting Solutions

Item	Solution
Aiming line does not appear	1. Make sure the system is in Power On status. 2. Check trigger button is pressed.
Barcode is unreadable	1. Make sure the barcode is not defaced. Test a bar code of the same bar code type. 2. Adjust the scan angle, moving closer or farther away as required.
Barcode is out aiming line area	Move the cross aiming line over the bar code.