PROTECH SYSTEMS
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MH-5100

Quick Reference Guide

Ver. Q1

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Packing Checklist

If you discover any item below are damaged or lost, please contact your vendor immediately.

- ☑ MH-5100 Integrated Pad x1
- ☑ This Quick Reference Guide x1
- ☑ AC Power Adaptor x1
- ☑ Manual/Driver DVD x1
- ☑ Hand Strap Set (2 x strap brackets, 2 x pan head screws (M3 x 6 mm), Velcro badge) x1
- ☑ Neck Strap x1

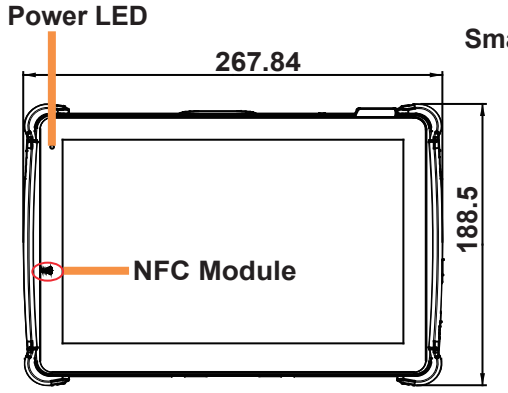
Specifications

System	
CPU Type	Intel® Bay Trail T/CR Z3735F Processor
Memory Support	1 x DDR3L on board, up to 2GB
O.S.	Windows® 10 IoT Enterprise LTSB 2016 OS (32 bits)
Speaker	1W Speaker x 1
Battery Pack	Main battery (1S2P) & RTC battery
BIOS	Insyde BIOS / SPI Flash ROM
Wi-Fi + Bluetooth module	802.11 a/b/g/n wireless LAN and Bluetooth 4.0 module
G-Sensor	Accelerator sensor
IP Rating	IP54
Dimension (LxWxT)	259.9 mm x 175.9 mm x 17.7mm
System Weight	Less than 838g
Power Supply	DC 12V/2A/24W
Display	
LCD Panel	10.1" LED backlight LCD, LVDS interface
Touch Panel	10.1" PCT (Focal touch IC) / I2C interface
Max. Resolution	1280x1800 dots WXGA
Integrated Devices	
Barcode Scanner	Honeywell N3680 2D Barcode scanner
3G Module	3.75G supports SIM card interface
NFC Module	NXP
Rear Camera	5M pixels camera module with autofocus function
MSR Module	IDTECH
Smart Card Reader Module	IDTECH
Storage (SDIO Interface)	
Storage	32GB eMMC storage and MicroSD storage for external memory expansion
External I/O Ports	
DC-IN Jack	1 x DC-IN Jack
Cradle Connector	1 x POGO pins (1x10 pins)
USB	Standard USB (Type A) x1 for external expansion
SD (Secure Digital)	MicroSD Slot for internal memory expansion
SIM Card Slot	For cellular network services
Audio Jack	Audio Jack x 1
Environment	
Operating Temp.	0°C~ 40°C (32°F ~ 104°F)
Storage Temp.	-20°C~ 60°C (-4°F~ 140°F)
Operating Humidity	0%~ 90% (no condensation)

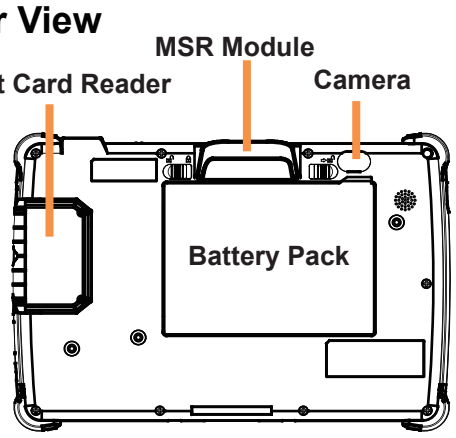
System View

Unit: mm

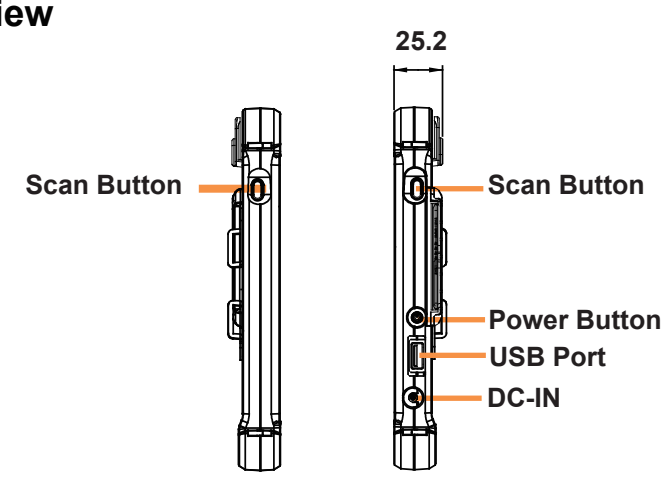
Front View



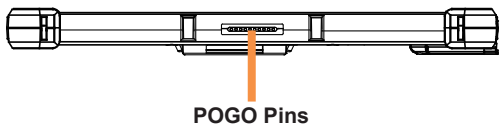
Rear View



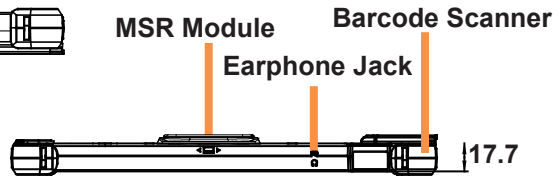
Side View



Bottom View



Top View



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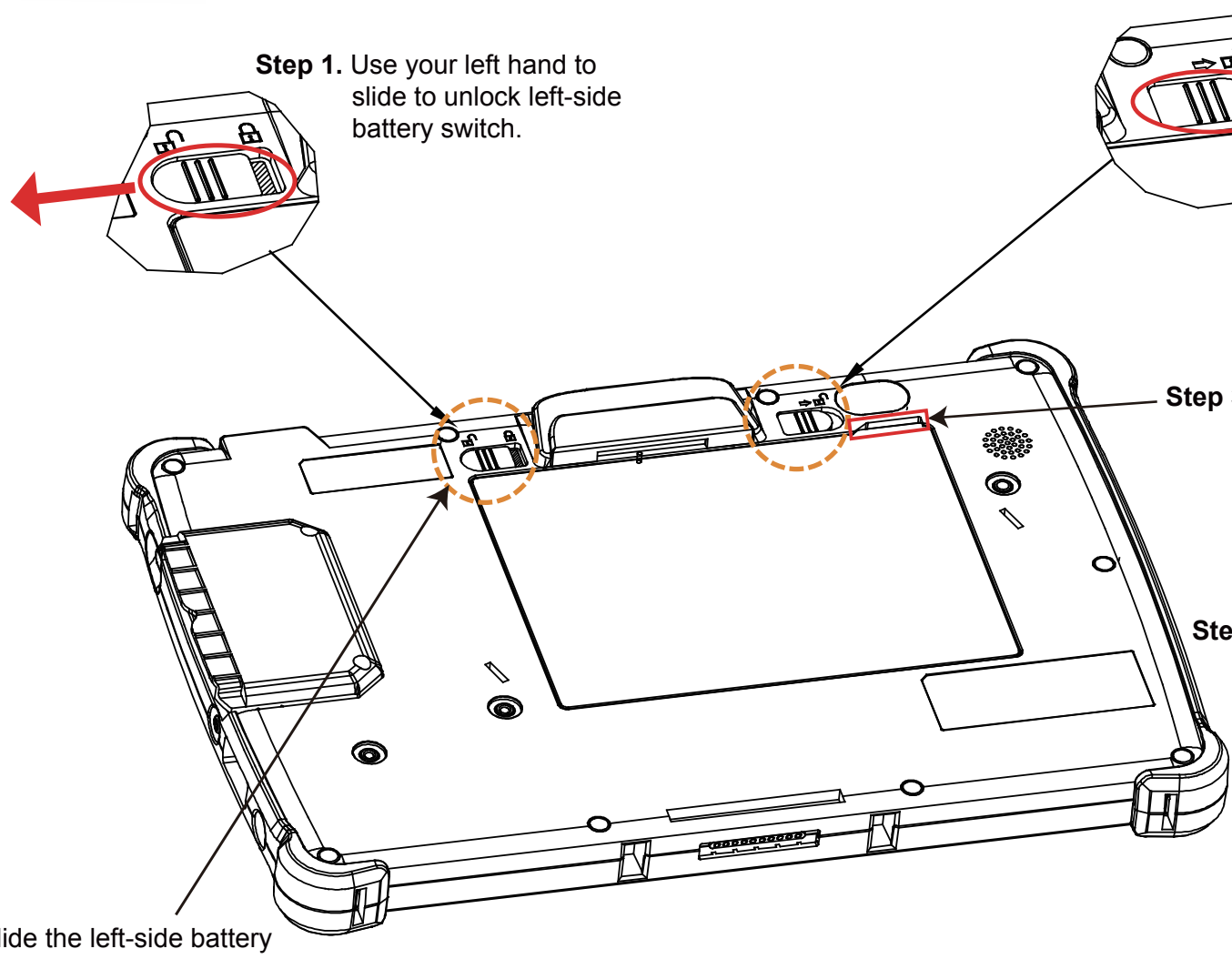
10.1" Integrated Pad Powered By Intel® Bay Trail Platform with Intel® Atom™

Quick Setup

Step 1. Use your left hand to slide to unlock left-side battery switch.

Step 2. Push sliding tab to the right side and long press on it and hold it.



Step 3. Use a fingertip of your right hand to remove the battery from the slim opening.

Step 4. Replace a new battery onto back of Pad and the right-side locking switch snaps into place automatically.

Step 5. Slide the left-side battery switch to the right to secure and lock up the replaced battery to complete.

Safety Precaution

The following messages are reminders for safety on how to protect your system from damages and to extend a long life of the system.

1. Check the Cable Voltage
- Make sure the range of operating voltage between AC 100V ~ 240V. Otherwise, the system could be damaged.

2. Environmental Conditions
- Place your MH-5100 on a sturdy, level surface. Be sure to allow enough space to have easy access around the system.
- Avoid extremely hot or cold place to install the system.
- Avoid exposure to sunlight for a long period of time or in an airtight space.
- Avoid the system from any heating device or using it outdoors in a cold winter day.
- Bear in mind that the operating ambient temperature is from 0 ~ 40°C (32 ~ 104°F).
- Avoid moving the system rapidly from a hot place to a cold place and vice versa because condensation may come from inside of the system.
- Don't place the system close to any radio active device in case of signal interference.

3. Handling
- Avoid putting heavy objects on top of the system.
- Don't allow foreign objects to fall into this product.
- If water or other liquid spills into this product, unplug the power cord immediately.

4. Good Care
- When the outside of the case is stained, remove the stain with a neutral washing agent with a dry cloth.
- Never use strong agents such as benzene and thinner to clean the system. If heavy stains are present, moisten a cloth with diluted neutral washing agent or with alcohol and then wipe thoroughly with a dry cloth.
- If dust has been accumulated on the outside, remove it by using a special made vacuum cleaner for computers.
- Don't contact the surface of capacitive touch before entering your operation system, or capacitive touch may have position problems for electrostatics interface.
- Don't exchange the M/B battery by yourself or serious damage may incur.

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

WARNING! Some internal parts of the system may have high electrical voltage. And therefore we strongly recommend that qualified engineers can open and disassemble the system. The LCD and Touchscreen are easily breakable, please handle them with extra care.

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MH-5100 Lite Cradle

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☑ This Quick Reference Guide	x1
☑ AC Power Adaptor	x1
☑ AC Power Cord	x1

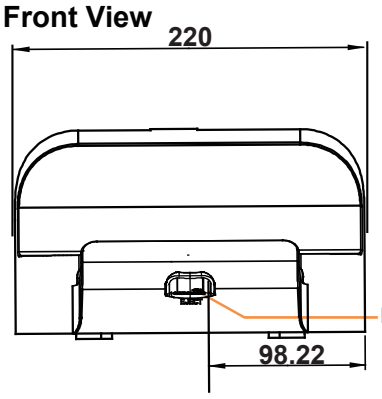
Specifications

Lite Cradle	
Cradle Connector	POGO pins (1 x 10 pins) (Interface: USB 2.0 / Power / Ground)
Kensington Security Lock slot	Lock slot x 1
Lock Switch	Lock switch x 1 used to fix Integrated Pad and Lite Cradle
AC Power Adapter	12V/5A/60W AC Power Adapter
Weight	About 858g
Dimension	220mm x 217.23mm x 131.65mm
Rear I/O Ports	
DC-IN Jack	DC 12V IN (pin's φ =2.5mm) x 1
USB Ports	USB1/USB2: Dual standard Type A USB 2.0 ports
Serial Ports	COM1: RJ-45 with 12V/5V/RI x 1
	COM2: D-Sub 9 with 12V/5V/RI x 1
LAN Port or	LAN1: 10/100 Mbps, RJ-45 x 1
Cash Drawer Port	DRW1: RJ-11 with 12V/1A x 1
Environment	
Operating Temp.	0°C~ 40°C (32°F ~ 104°F)
Storage Temp.	-20°C~ 60°C (-4°F~ 140°F)
Operating Humidity	0% ~ 90% (no condensation)

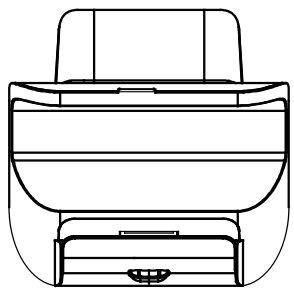
System View

Unit: mm

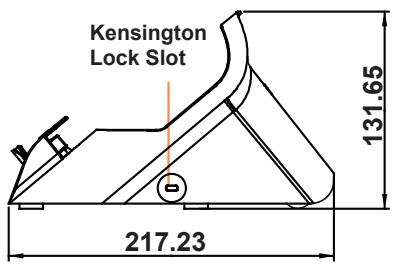
Front View



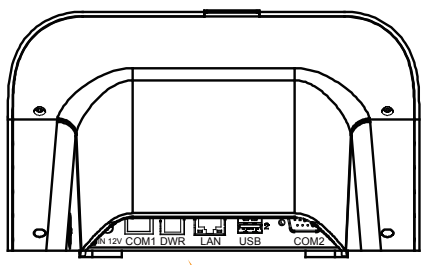
Top View



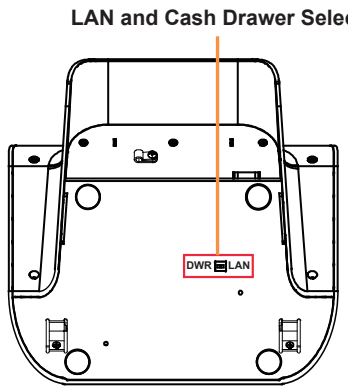
Side View



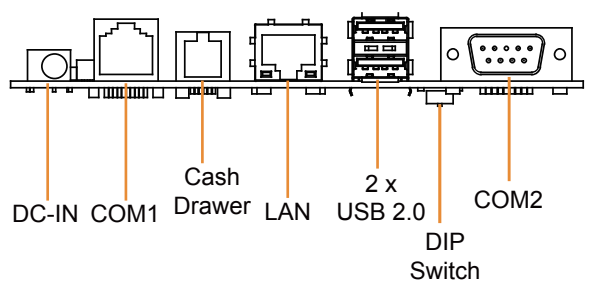
Rear View



Bottom View



Rear I/O Ports



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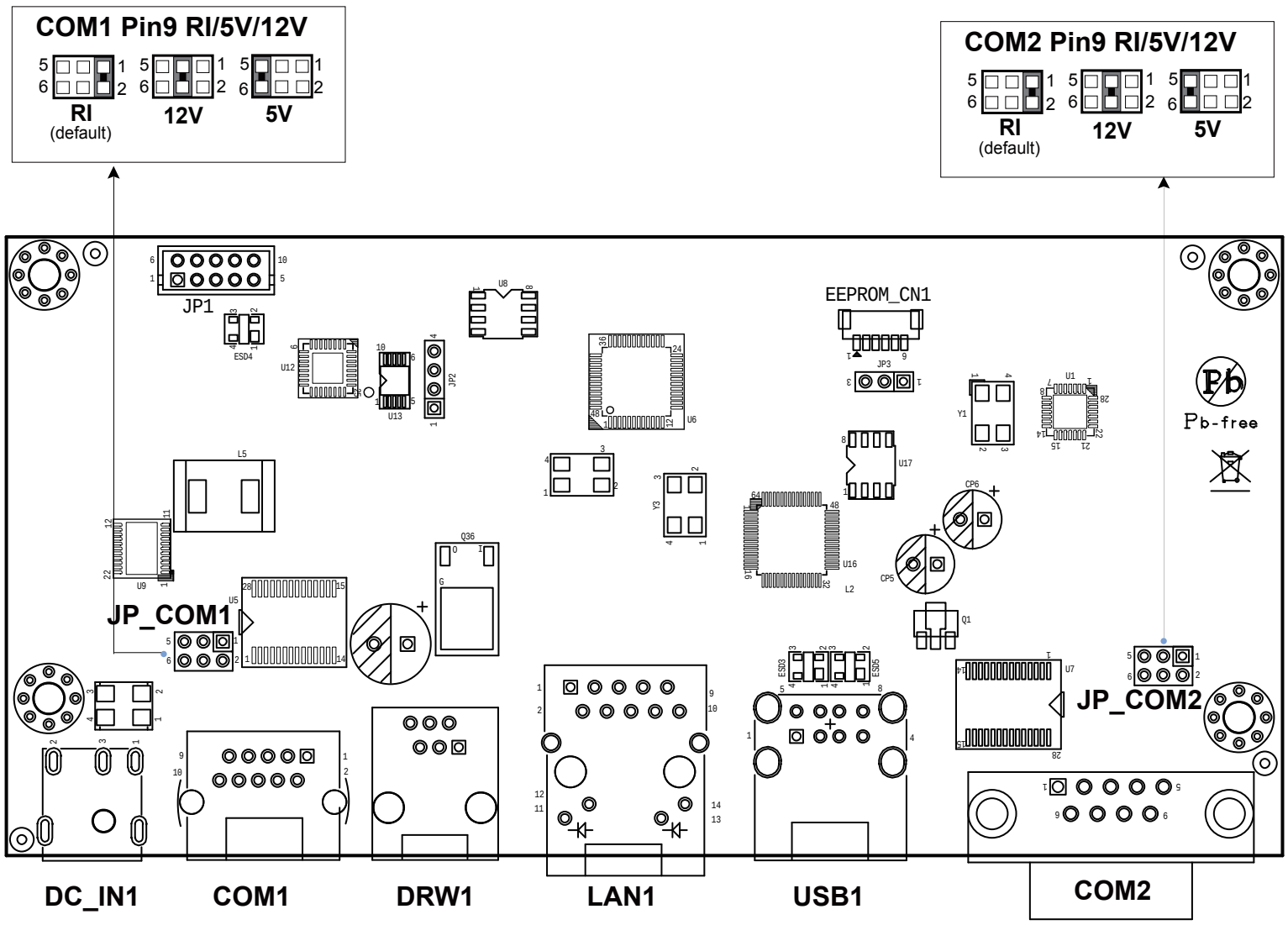
Jumper Settings



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