

# MRC 2100

Rugged 8.4" Fan-less Tablet PC with Intel® Atom™ Processor/  
Daylight Readable Display/ Touch Screen/ WiFi/ Bluetooth/ GPS



## Main Features

- Intel® Atom CPU 1.1GHz and 1.6GHz (2W~2.4W)
- Built-in WiFi 802.11/b/g/n / Bluetooth module/ GPS
- Built-in 3.5G , CDMA or WIMAX module (Optional)
- Daylight Readable Display
- Built-in 1D Laser Barcode Scanner or RFID (Optional)
- 1 x Navigation Key and 6 x Programmable Function Key
- Integrated Secure Data by Infineon TPM 1.2 and Fingerprint
- More than 4~8 Hours Long Battery Life
- Rugged design- Meets Multiple MIL Specs

## Product Overview

The MRC 2100 is a handheld mobile tablet computer with ultra robust mechanical design and versatile functions. Featuring Intel® Atom™ processor up to 1.6 GHz with 512 KB on-die L2 cache, the MRC 2100 provides a powerful mobile computing platform with an 8.4 inch TFT color LCD and daylight readable touch screen. The MRC 2100 has built-in WiFi 802.11/b/g/n and Bluetooth to enhance the mobility and smooth data access for various vertical markets. Furthermore, the MRC 2100 has the strictest measurement to protect all your sensitive data by implementing TPM encryption and fingerprint security features. The long lasting battery life can provide an uninterrupted use for 4~8 hours.

To extend its functionality, the MRC 2100 has a docking connector for USB, and SDVO ports, while the expansion slots include Mini Card socket. The MRC 2100 can be tailored to fit in various vertical applications, such as Point of Services, retailing, logistic and much more.

## Specifications

### CPU Support

- Intel Atom processor 1.1 GHz and 1.6 GHz with 512 KB on-die L2 cache, 400MHz/ 533MHz FSB (2W~2.4W)

### Chipset

- Intel® System Controller Hub US15W (single chip integrated graphics and I/O controller)

### Main Memory

- 1 x 200-pin DDR2 SO-DIMM socket, up to 2 GB SDRAM

### Storage

- 1 x SSD (ZIF Type) PATA interface
- 1 x 1.8" HDD (8mm ZIF) PATA interface (Optional)

### Audio

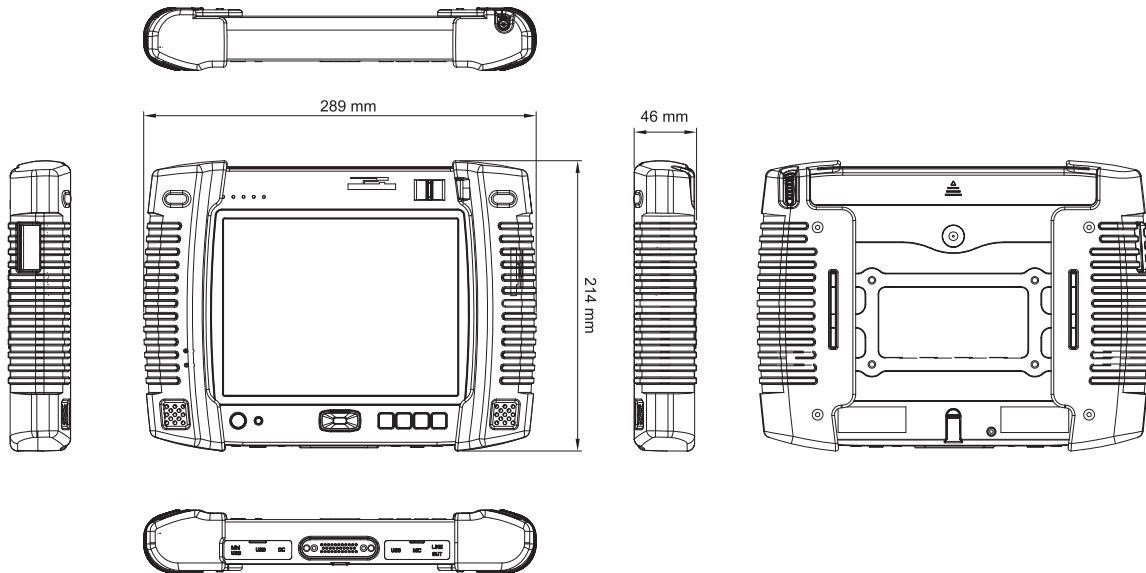
- ALC888-VC2-GR HD Codec
- AC '97 Compatible
- 1 x external MIC-in and 1 x external Line-out

### Display

- Intel System Controller Hub US15W ultra low power controller integrated with 2D & 3D HW accelerator and high definition hardware video decode engine, UMA up to 256 MB
- Internal LVDS display port and SDVO expansion port
- Supports dual independent display (LVDS + SDVO)
- LVDS: supports IGD to communicate directly to an on-board flat panel display, panel support 800x600 SVGA 18bit TFT LCD,
- Touch Screen: Analog Resistive 4 wire daylight readable touch screen
- Ambient light sensor for LCD backlight control



## Dimension Drawing



### I/O

- 2 x External USB 2.0 port ; 1 x Mini USB (Client)
- 1 x Bluetooth Module V 2.0 + EDR
- 1 x Finger Printer Sensor
- 1 x PATA ZIF Connector for SSD or 1.8" HDD
- 1 x MIC-in / Line-out
- 1 x 2.0 M CMOS Camera
- 1 x 19V DC power input
- 1 x 3.5G Module (optional)
- 1 x WiFi Module
- 1 x GPS Module
- 1 x 32-pin PoGo connector for docking station
- 1 x RFID Module (optional)
- 1 x Barcode scanner (optional)

### I/O Interface-Front

- Power on/off Status (Blue LED on power switch)
- Battery Status (Green LED : Battery Discharged / Glows Orange: charging / fully charged : Battery LED turn off)
- Battery Low (Battery LED : Glows Green and Power LED Glows Blue)
- Wireless on/off LED (Orange LED on Wireless on/off switch ,Glows Orange is being accessed)
- Hard Disk Drive Status (Green LED: Glows Green HDD is being accessed)
- 4 x Programmable function keys
- Navigation key
- Power ON/OFF switch
- Wireless ON/OFF switch
- Camera Snap Shot button
- Barcode Scanner button

### Expansion Slot

- Bus Interface: SDVO and USB 2.0
- Docking Connector:
  - 2 x USB 2.0
  - 1 x RS-232
  - 1 x VGA port (optional)
  - 1 x Mini card socket
  - 1 x LAN 10/100 base-T port
  - DC-in 9-36V power input

### Power Input

- Power Input Voltage: DC 19V/3.42A
- Power Output: 65W (Max)
- Internal Battery: Rechargeable 3 Cell (3S1P) Lithium Ion Smart Battery Pack(2600 mAh @ 11.1V, 28.86W/hr) Over Charge Protection, Over Discharge Protection, Over Current and Output Short
- External Battery (optional): Rechargeable 6-Cell (3S2P) Lithium Ion Smart Battery Pack (5200 mAh @ 11.1V, 57.72W/hr) Over Charge Protection, Over Discharge Protection, Over Current and Output Short

### Dimensions

- 289 x 214 x 46 mm with Rubber; 280 x 205 x 37 mm without Rubber
- Weight: 1.65 Kg with Rubber; 1.35 Kg without Rubber

### Construction

- Plastic – upper and lower housing (ABS + PC)
- Color: Black (1 color for top cover and bottom Logo position - silk screen on surface)

## Environment

- **Operating Temp: -20°C to 50°C**  
Tested MIL-STD-801F methods 501.4, 502.4
- **Storage Temp: -30°C to 60°C**  
Tested MIL-STD-801F methods 501.4, 502.4
- **Thermal Shock: -20°C to 50°C**  
Tested MIL-STD-810F method 503.4
- **Rel. Humidity: 0 to 95%**  
Tested MIL-STD-810F method 507.4
- **Vibration 5G PTP at 5-500Hz**  
Tested MIL-STD-810F method 514.5C-3 (Highway truck)
- **Transit Shock: 4 feet drop, polywood, all surfaces, edges and corners (26drops)**  
Tested MIL-STD-810F method 516.5
- **Mechanical Shock: 20g, 11ms, Terminal Sawtooth, Operating 40g, 11ms, Terminal Sawtooth, Non-Operating**  
Tested MIL-STD-810F method 516.5
- **Crash Shock: 75g, 11ms, Terminal Sawtooth**  
Tested MIL-STD-810F method 516.5
- **Rain: Drip Proof, 7 gal/ft<sup>2</sup>/hr**
- **Compliance: MIL-STD-810F and IP54**

## Certifications

- CE approval
- FCC Class B

## Ordering Information

- **MRC2100-510H (P/N:10U00210001X0)**  
8.4" Fan-less Ruggedized Tablet PC  
with Intel Atom 1.1GHz Processor/60GB HDD/1GB Memory/Sunlight Readable Touch Screen
- **MRC2100-510S8 (P/N:10U00210005X0)**  
8.4" Fan-less Ruggedized Tablet PC  
with Intel Atom 1.1GHz Processor/8GB SSD/1GB Memory/Sunlight Readable Touch Screen
- **MRC2100-530S8 (P/N:10U00210006X0)**  
8.4" Fan-less Ruggedized Tablet PC  
with Intel Atom 1.6GHz Processor/8GB SSD/1GB Memory/Sunlight Readable Touch Screen
- **Optional Accessory Ordering Information for MRC 2100**  
1D Laser Barcode scanner-Opticon (P/N:88U00210004X0)  
3.5G GSM Module: Sierra MC8775V (P/N:88U00210005X0)  
RFID Module: HF type 13.56MHz (P/N:88U00210003X0)  
MRC2100 Battery Pack (3S1P) (P/N:4ZTSS26301X00)  
Windows Vista (P/N:6014400749X00)  
Windows XP Pro for Embedded (P/N:6014400748X00)  
Windows XP embedded (P/N:6014400798X00)  
MRC2100 Power Adapter (P/N:7400065005X00)  
POWER CABLE (US) (P/N:60233POW38X00)  
POWER CABLE (EU) (P/N:60233POW39X00)  
POWER CABLE (UK) (P/N:60233POW40X00)