

NXP i.MX6 ARM Cortex-A7/A9 Single Board Computers

- **OMT-2200AR** i.MX6Q/D/S SBC with PoE+ (Power over Ethernet)
- **OMT-2100AR** i.MX6Q/D/S SBC for general embedded systems
- **OMT-POSAR** i.MX6Q/D SBC designed for POS applications
- **OMT-1800AR** i.MX6UL SBC with on-board 3G/GPS for IOT gateway



OMT-2200AR



OMT-2100AR



OMT-POSAR



OMT-1800AR



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OMT-2200AR (ARM Cortex Single Board Computer)

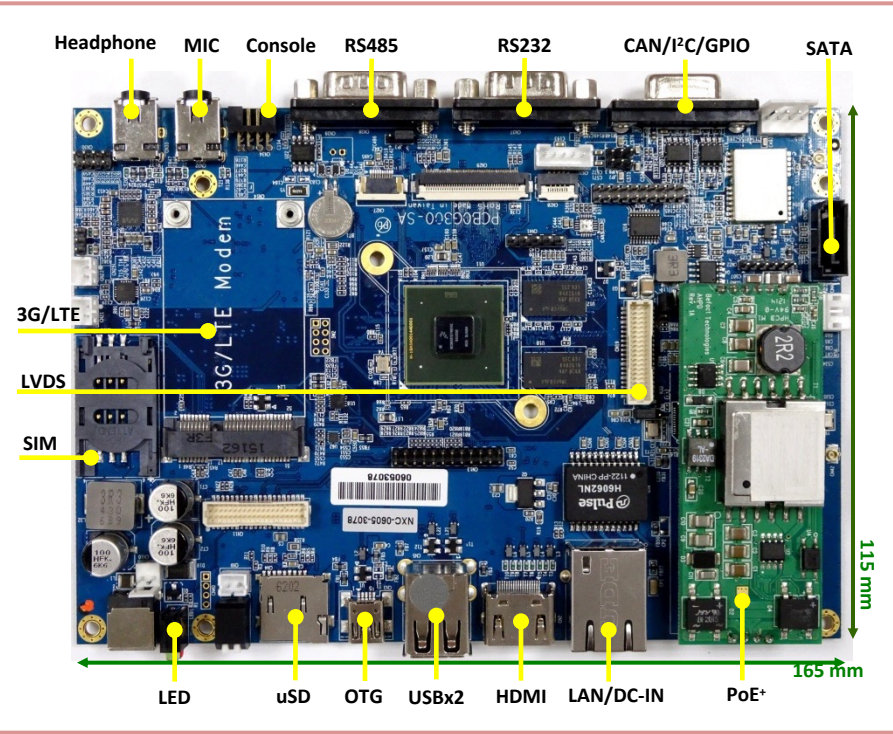
Technical Specifications

	OMT-2200AR	OMT-2100AR	OMT-POSAR	OMT-1800AR
CPU	NXP iMX6 ARM Cortex™-A9 @ 1GHz			NXP iMX6UL ARM Cortex™-A7 @ 500MHz
Cores	Quad / Dual / Solo			Single
OS	Android 6.0 / Yocto / Ubuntu			Yocto
DDR3 RAM	1GB (Dual, Solo) / 2GB (Quad)			256MB
Flash ROM	4GB flash (eMMC)			512MB
Ethernet	1 × GbE (RJ-45)			1x 10/100Mbps (RJ-45)
PoE+ (PD) / 802.3at	YES	---		---
Power on/off MCU	YES	---		---
Display Interface	1 × TTL LCD connector		---	---
	1 × LVDS (2-channel)		---	---
	1 × HDMI 1.4		---	---
Touch Interface	1 × 4w resistive / 1 × capacitive		1 × 4w/5w resistive / 1 × capacitive	---
Audio Interface	1 × mic / 1 × headphone 1x Line-in / 2 × speaker			1 × mic / 1 × headphone
SD Card slot	1 × microSD			1x microSD
SATA	1 × SATA II connector			---
miniPCle	1x connector			---
G-Sensor	(optional)	---		YES
3G/LTE Modem	(optional)			YES
GPS	(optional)			YES
WiFi/BT	(optional)			(optional)
USB 2.0	1 × OTG + 2 × Host		1 × OTG + 7 × Host	1 × OTG + 2 × Host
COM ports	1 × RS-232 + 1 × RS-485 1 × console		3 × RS-232 + 1 × RS-485 1 × console	1 × RS-232 + 1 × RS-485 1 × console
I2C port	1x master		1x master	1x master
GPIO	8-bit (extendible to 16-bit)		5-bit	14-bit
CAN Bus	2x CAN 2.0b		---	1x CAN 2.0b
Power Input	DC 9V-36V	DC 9V-36V	DC 24V	DC 9V-36V
Dimension(mm)	165 x 115 x 26	146 x 101 x 23	215 x 90 x 21	125 x 115 x 23
Weight	Approx. 172g	Approx. 120g	Approx. 153g	Approx. 117g
Environment	Operating temp: -20°C to 70°C			

OMT-2200AR (ARM Cortex Single Board Computer)

OMT-2200AR Features:

- NXP iMX6 Quad/Dual/Solo ARM Cortex-A9 CPU @ 1GHz
- PoE+ (Power over Ethernet) / PD / IEEE802.3at
- On-board MCU to control SBC power on/off
- Dual channel LVDS for 1080p LCD
- Interfaces:
 - CAN bus, I²C, GPIO, RS232/485
 - LAN, USB, microSD, Audio, SATA
- 3G/LTE module (optional)
- WiFi/Bluetooth module (optional)
- GPS/G-Sensor/E-Compass (optional)
- Support Android, Yocto, Ubuntu



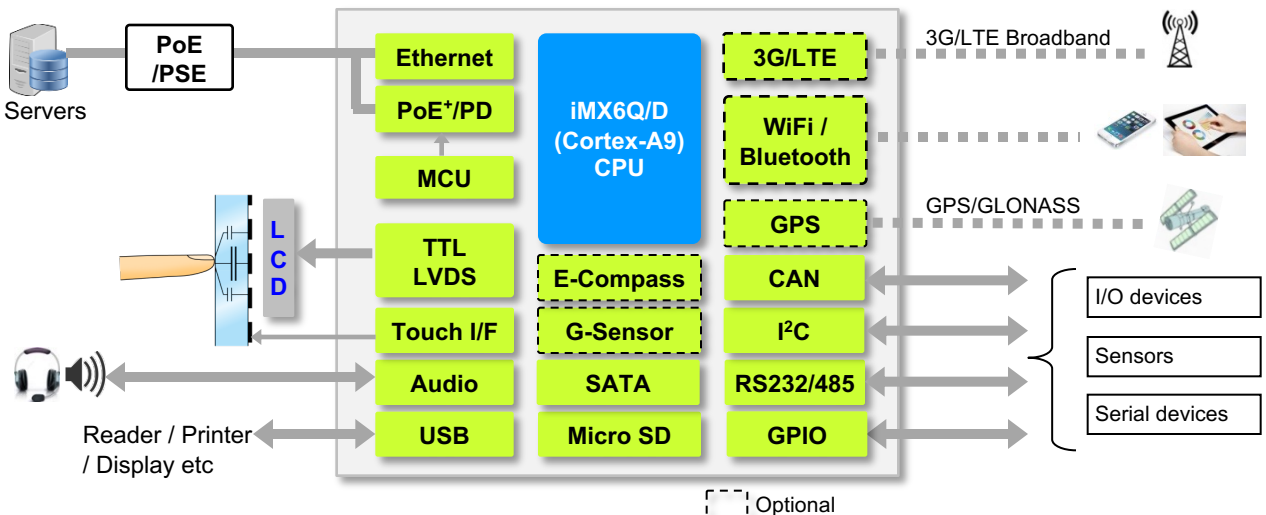
Overview

The OMT-2200AR is a cost-effective single board computer for a wide range of commercial and industrial applications. Integrated with IEEE802.3at PoE+ PD module, the OMT-2200AR receives RJ45 port DC input from external power source and eliminates the need of a power adapter. An on-board MCU is used to control SBC power on/off by software. This feature allows software to shutdown system power and start power after a period of time.

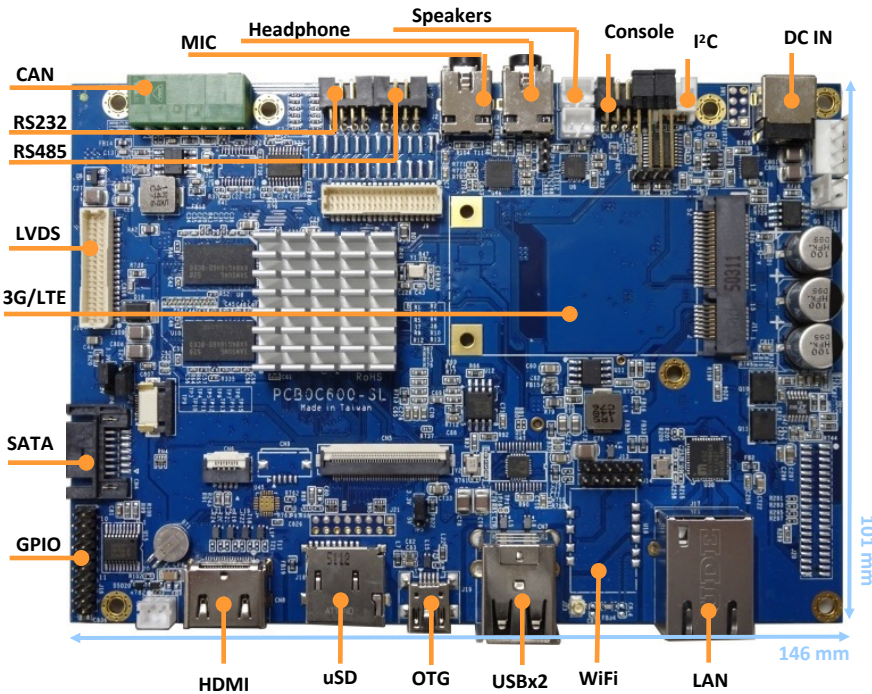
Typical Applications

- Digital signage , POS, KIOSKs
- Machine control / Data logger
- Vehicle Infotainment
- Industrial Equipment
- Surveillance system

Block Diagram



OMT-2100AR (ARM Cortex Single Board Computer)



- NXP iMX6 ARM Cortex-A9
- Quad/Dual/Solo CPU @ 1GHz
- 9V~36V wide range DC input
- Dual channel LVDS for 1080p LCD
- Interfaces:
 - CAN bus, I²C, GPIO, RS232/485
 - LAN, USB, microSD, Audio, SATA
- Over voltage protection (optional)
- 3G/LTE module (optional)
- WiFi/Bluetooth module (optional)
- Support Android, Yocto, Ubuntu

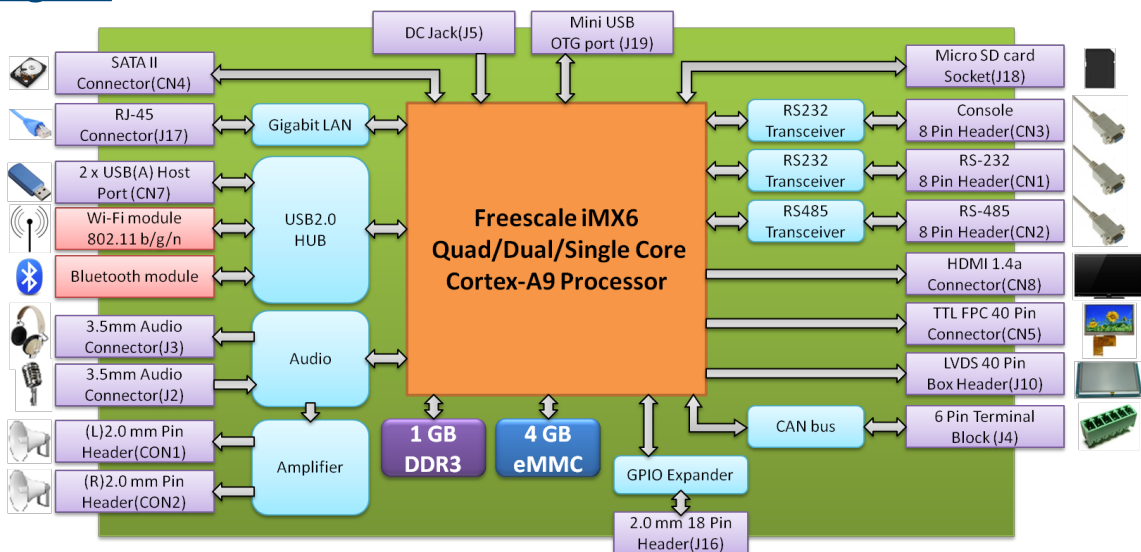
Overview

The OMT-2100AR is a cost-effective single board computer for a wide range of commercial and industrial applications. Integrated with essential system interfaces with ample options for expanding hardware capabilities, the OMT-2100AR enables fast and easy development of applications, ensuring prompt time-to-market turnaround.

Typical Applications

- Digital signage , POS, KIOSKS
- Gaming devices
- Machine control / Data logger
- Vehicle Infotainment
- Industrial Equipment

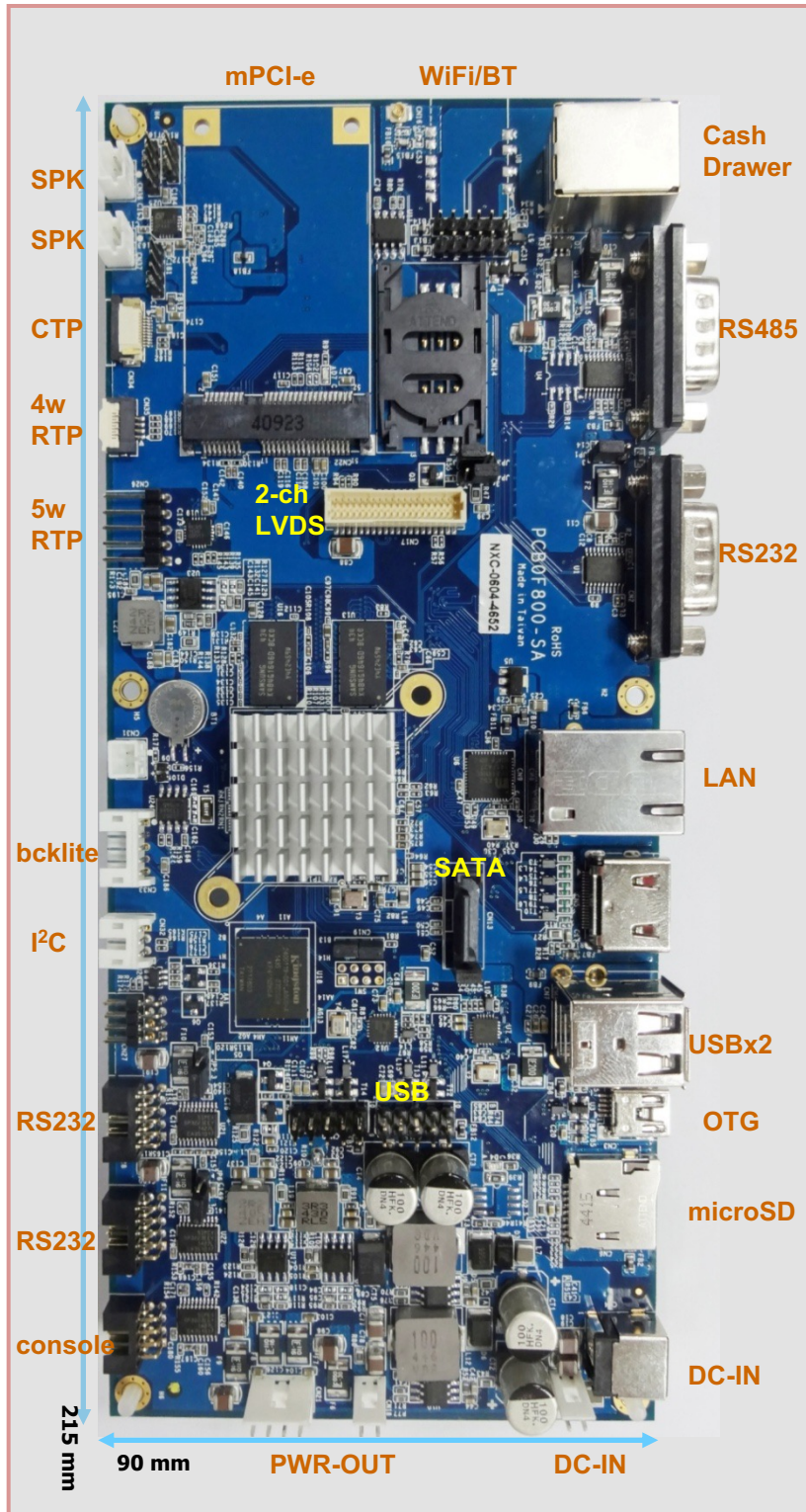
Block Diagram



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OMT-POSAR (ARM Cortex Single Board Computer)

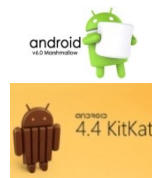


OMT-POSAR Product Features:

- NXP i.MX6 ARM Cortex-A9 quad-core single board computer for POS applications
- Dual channel LVDS up to 1920x1080 LCD
- I²C master port for external peripheral expansion
- 4x RS232 port with power pin
- 1x RS485 port (can be configured to RS232)
- 7x USB 2.0 host ports
- Multiple touch screen interfaces (capacitive, 4-wire resistive, 5-wire resistive)
- 24V power input
- Quad-band (3G) module (optional)
- WiFi and Bluetooth BLE module (optional)
- Dimension: 215mm x 90mm x 21mm



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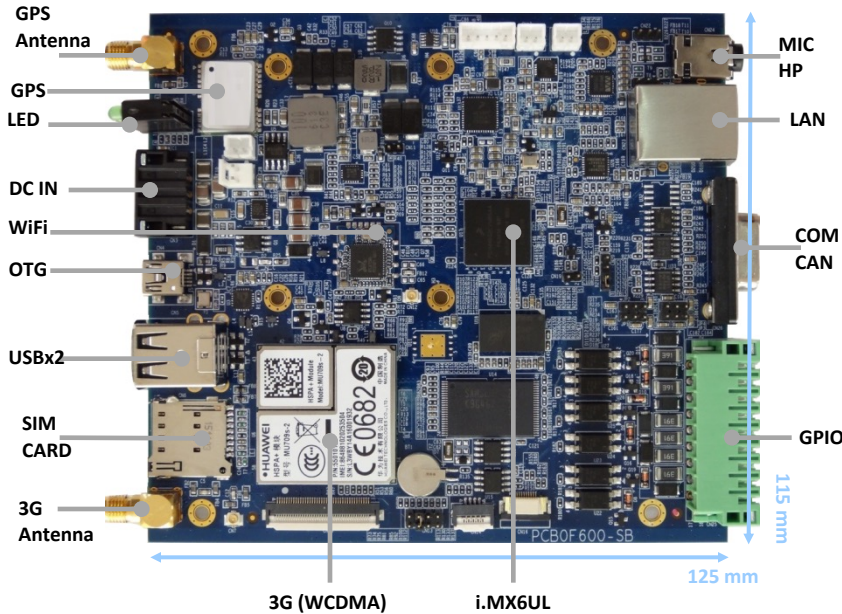
Typical Applications

- ❑ POS
- ❑ KIOSKs
- ❑ Thin Client
- ❑ Data logger
- ❑ Industrial Equipment

OMT-1800AR (ARM Cortex Single Board Computer)

OMT-1800AR Features:

- NXP iMX6UL ARM Cortex-A7 CPU @ 500MHz
- 9V~36V wide range DC input
- Interfaces:
 - CAN bus, I²C, RS232/485
 - LAN, USB, microSD
- Photo-coupled GPIO
- GPS module
- 3G (WCDMA) module
- WiFi/Bluetooth module (optional)
- Linux Yocto



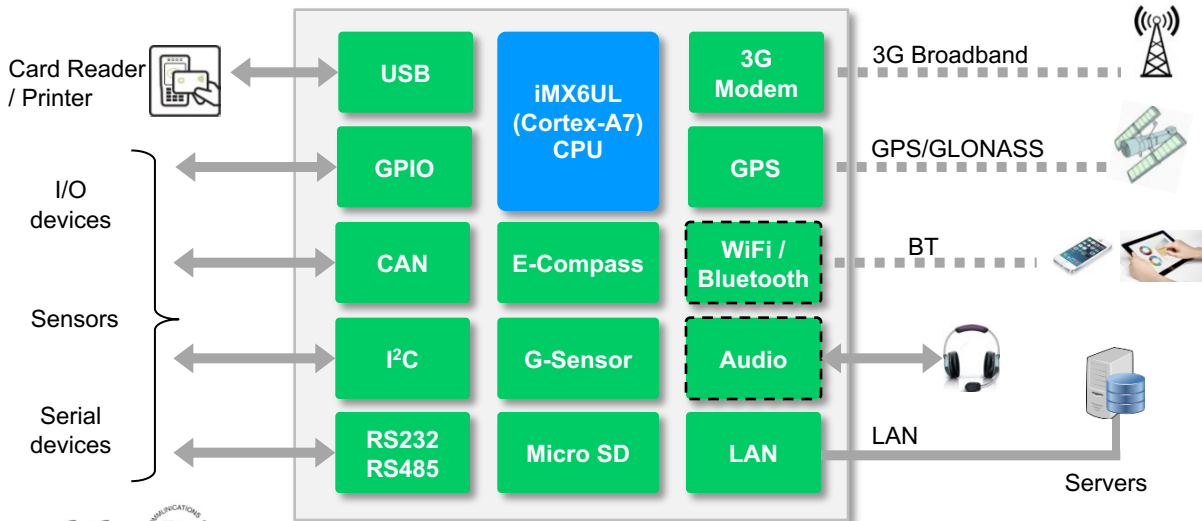
Overview

The OMT-1800AR is a cost-effective single board computer for a wide range of commercial and industrial applications. Integrated with an ARM Cortex-A7 low power processor and the latest Linux kernel, the OMT-1800AR enables fast and easy development of applications, ensuring prompt time-to-market turnaround. The built-in 3G module, GPS receiver and optional WiFi module, allows user to implement OMT-1800AR as a router, or IOT gateway.

Typical Applications

- IOT Gateway
- Sensor Gateway
- Vehicle Router
- Fleet Management

Block Diagram



Optional

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Ordering Information

OMT-2200AR Ordering Information

Part No.	OS	CPU	RAM	Common Specifications
OMT-2200AR-QY	Yocto	iMX6Q Quad-Core	2GB DDR3	4GB NAND Flash IEEE 802.3 PoE+ PD On board MCU for power on/off LCD / LVDS / HDMI / Touch interfaces (resistive/capacitive) Audio / LAN / USB host / USB OTG / GPIO (> 8) RS232 / RS485 / MicroSD / SATA / I ² C master port
OMT-2200AR-QA	Android			
OMT-2200AR-DY	Yocto	iMX6D Dual-Core	1GB DDR3	
OMT-2200AR-DA	Android			

OMT-2100AR Ordering Information

Part No.	OS	CPU	RAM	CAN Bus	GPIO	Over-Voltage Protection	Common Specifications
OMT-2100AR-QY	Yocto	iMX6Q Quad-Core	2GB DDR3	NO	8-bit	NO	4GB NAND Flash LCD / LVDS / HDMI Touch I/F (resistive/capacitive) Audio LAN / USB host / USB OTG RS232 / RS485 MicroSD / SATA I ² C master port
OMT-2100AR-QA	Android						
OMT-2100AR-QY-V	Yocto			YES	16-bit	YES	
OMT-2100AR-QA-V	Android						
OMT-2100AR-DY	Yocto	iMX6D Dual-Core	1GB DDR3	NO	8-bit	NO	
OMT-2100AR-DA	Android						
OMT-2100AR-DY-V	Yocto			YES	16-bit	YES	
OMT-2100AR-DA-V	Android						

SBC-POS Ordering Information

Part No.	OS	Common Specifications
OMT--POSAR-QU	Linux	iMX6Q (Quad) 1GB RAM / 4GB NAND Flash Touch interfaces (resistive/capacitive) LVDS / Audio / MicroSD / SATA / LAN USB host / USB OTG / RS232 / RS485
OMT--POSAR-QA	Android	

OMT-1800AR Ordering Information

Part No.	Over-Voltage Protection	WiFi / BT	Common Specifications
OMT-1800AR-Q69	NO	NO	iMX6UL (ARM Cortex-A7) 512MB NAND Flash / 256MB DDR RAM Quad-band 3G module / GPS / G-sensor LAN / USB host / USB OTG / microSD RS232 / RS485 / I ² C port / Photo-coupled GPIO
OMT-1800AR-Q69-V	YES		
OMT-1800AR-Q69-WB	NO	YES	
OMT-1800AR-Q69-WB-V	YES		

Optional Products:

Part No.	Description
PWR-002	+24V @ 1.5A DC power adapter
CAB-001	(2x4-pin-to-DB9) RS232 cable for console port
WLS-006	(BL-8723 WiFi + BT) + Antenna (8cm/2dBi, SMA plug reverse)

Part No.	Description
D120-SC	4xCOM port module (4x RS232/RS422)
LTE module	(Contact us)
WCDMA-002	Quad Band 3G (WCDMA) module (w GPS) + 3G Antenna

(** Note: Not all models are available now. Contact our sales representative for more details.)

Last Update: June, 2017



