



EMX-IMX7

Reflective electrophoretic display system board

- > NXP i.MX 7 Dual Processor
- > Dual ARM® Cortex®-A7 Cores And Cortex-M4
- > 1GB DDR3L On-Board or optional 2GB
- > 8GB eMMC On-Board
- > 1 x RJ-45 port supports Gigabit LAN
- > 2 x 50pins connector for E INK display
- > 2 x USB 2.0 (Edge I/O)
- > 4 x USB 2.0 (Internal)
- > 1 x Micro USB for USB OTG
- > 1 x Micro SD card slot
- > 1 x M.2 E-Key Socket for WiFi/BT module expansion
- > 2 x 0.5W Speakers out connectors

+ Spec

System Information

Processor	NXP i.MX 7 Dual Processor Dual ARM® Cortex®-A7 Cores And Cortex-M4
System Memory	1GB DDR3L On-Board or optional 2GB

Storage

Storage	8GB eMMC On-Board
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External I/O

USB Port	1 x dual stack USB connector for two USB 2.0
LAN Port	1 x RJ-45 port supports Gigabit LAN

I/O

USB Port	4 x USB 2.0 ports (Wafer 5Px2 B-W 2.0)
GPIO	One 1 x 12-pin wafer for 8 bit GPIO
CMOS Battery	1 x CR-2032/3.0V
UART	Two 1 x 4-pin wafer for Cortex-A7&Cortex-M4 debug
Other	1 x Micro SD card slot 1 x M.2 E-Key Socket for WiFi/BT module expansion Four 1x5-pin wafers for I2C

DC In / Out Connector

Input Power Connector	1 x Lockable DC Jack
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DC In/Out Characteristics

Power Type	DC IN
Working Voltage	12V/5A

Display

Digital Display Interface	Parallel Data , 2 x 50pins Connector
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Mechanical

Power Type	DC IN, 12V/5A
Weight	0.35kg

Audio

Speaker Output	Two 1x2-pin wafers for Speaker Left/Right
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Certifications

Certification Information	CE Class B FCC Class B
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Ethernet

Ethernet Interface	Support 10/100/1000 Base-Tx
LAN Port	1 x RJ45

Power Requirement

DC Input	12V/5A
DC Input Connector	1 x Lockable DC Jack
Power Mode	AT Mode
Power Type	DC IN

Mechanical & Environmental

Operating Temperature	-10°C ~ 60°C (w/eMMC on board) ambient with air flow
Storage Temperature	-20°C ~ 70°C
Operating Humidity	40°C @ 95% Relative Humidity, Non-condensing
Weight	0.35kg
Power Requirement	DC IN, 12V/5A
Power Mode	AT Mode
Power Connector	1 x Lockable DC Jack
Dimension (L x W)	170mm x 170mm



Input Voltage	12V
Input Current	5A
Software Support	
OS Information	Linux Yocto/Android 5.1
Ordering Information	
Ordering Information	EMX-IMX7-A1R : EMX-IMX7 main board w/ 1G RAM, 8GB eMMC, GbE, USB, 12V DC-in, 1 Micro SD, 1 Micro USB, 1 M.2 E-Key support WiFi module EMX-IMX7-A2R : EMX-IMX7 main board w/ 2G RAM, 8GB eMMC, GbE, USB, 12V DC-in, 1 Micro SD, 1 Micro USB, 1 M.2 E-Key support WiFi module