



## 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

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

##### Storage

<b>Storage</b>	8GB eMMC On-Board
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##### External I/O

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

##### I/O

<b>USB Port</b>	4 x USB 2.0 ports (Wafer 5Px2 B-W 2.0)
<b>GPIO</b>	One 1 x 12-pin wafer for 8 bit GPIO
<b>CMOS Battery</b>	1 x CR-2032/3.0V
<b>UART</b>	Two 1 x 4-pin wafer for Cortex-A7&Cortex-M4 debug
<b>Other</b>	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

<b>Input Power Connector</b>	1 x Lockable DC Jack
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##### DC In/Out Characteristics

<b>Power Type</b>	DC IN
<b>Working Voltage</b>	12V/5A

##### Display

<b>Digital Display Interface</b>	Parallel Data , 2 x 50pins Connector
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##### Mechanical

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

##### Audio

<b>Speaker Output</b>	Two 1x2-pin wafers for Speaker Left/Right
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##### Certifications

<b>Certification Information</b>	CE Class B FCC Class B
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##### Ethernet

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

##### Power Requirement

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

##### Mechanical & Environmental

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



<b>Input Voltage</b>	12V
<b>Input Current</b>	5A
<b>Software Support</b>	
<b>OS Information</b>	Linux Yocto/Android 5.1
<b>Ordering Information</b>	
<b>Ordering Information</b>	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