



EPD-42T Communication Board

- > 42" E Ink Monochrome ePaper Display
- > Built-in Touch Screen
- > High Performance i.MX 7Dual Processor
- > Ultra-Low Power Consumption
- > Ultra-Wide Viewing Angle
- > No Power Needed to Maintain Display Image
- > Front IP65, Rear IPX1
- > Sunlight Readable and Doesn't Require a Backlight

+ Spec

System Information

Processor	NXP i.MX 7Dual Processor / Dual Arm® Cortex®-A7 Cores And Cortex-M4
Platform Controller Hub	NXP MCIMX7D7DVM10SD
System Memory	On-Board 2GB DDR3L
I/O Chipset	PCA9555
Board	EMX-IMX7
Battery	Wide Temperature RTC Battery
Antenna	2 x Antenna with dust cover

Expansion

Expansion	1 x M.2 E-Key socket for WiFi/BT module expansion
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Storage

Storage	On-Board 8GB eMMC / microSD Socket
Other Storage Device	1 x Micro SD card slot

External I/O

USB Port	2 x USB 2.0 (Edge I/O) 1 x Micro USB for USB OTG
LAN Port	1 x RJ-45 connector for Gigabit Ethernet
Wireless LAN Antenna	Optional with M.2 module

Panel

LCD Size	42"
LCD Panel	E Ink ED420TE1
Display Type	E Paper Display
Resolution	H:2160 × V:2880
Pixel pitch	0.2975 (H) × 0.2975 (V)
Contrast ratio	15:1 (Typ.)
Viewing angle	180(U), 180(D), 180(L), 180(R)
Backlight	Sunlight Readable / No Backlight Required
Touch Type	Projective Capacitive
Touch Screen	Built-in Projective Capacitive Touch Screen
Touch Light Transmission	≥80%
Touch Controller	IL12325
Touch Interface	USB

I/O

GPIO	4 x GPIO I/F
Serial	2 x TTL Serial I/F ; Supports Optional TTL to RS-232 Converter ; Supports Optional TTL to RS-485 Converter Supports Optional TTL to USB Converter

Wireless Communication

Bluetooth	Optional
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DC In/Out Characteristics

Power Type	DC-12V
Working Voltage	DC-12V

Mechanical

Power Connector Type	Lockable DC Jack
Weight	6.5kg
Shipping Dimension	983 x 876 x 121 mm
Shipping Weight	12.1kg
Color	Black

Audio

Speaker Output	2 x 0.5W Speakers
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Reliability

EMI Test	CE/FCC-B
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Operating Temperature	0°C ~ 40°C (w/SSD, mSATA) ambient with air flow
Operating Humidity	5% ~ 90% relative humidity, non-condensing
Unit Weight	6.5kg
Storage Temperature	-20°C ~ 60°C
Packaging Vibration Test	With On-Board 8GB eMMC/On-Board 1GB DDR3L: 0.5 Grms, IEC 60068-2-64, Random, 5~ 500Hz, 1hr/axis (Only for Z-axis)
Packaging Drop Test	Avalue Standard Test Criteria (Change to use ISTA-1A)
Certifications	
Certification Information	CE (EN 62368-1) FCC Part 15 Class B
Ethernet	
LAN Chipset	ICPlus IP1001M Gigabit Phy
LAN Port	1 x RJ-45 Supports 10/100/1000 Base-T
Power Requirement	
Adapter	Input: 100~240Vac/50~60Hz; Output: 60W (12V/5A)
Mechanical & Environmental	
Operating Temperature	0°C ~ 40°C (w/SSD, mSATA) ambient with air flow
Storage Temperature	-20°C ~ 60°C
Operating Humidity	5% ~ 90% relative humidity, non-condensing
Weight	6.5Kgs
IP Rating	Front IP65 / Rear IPX1
VESA	100x100
Dimensions(W x L x D)	918.8 x 704.6 x 37.6 mm
Power Requirement	DC-12V
Software Support	
OS Information	Android / Linux
In-Box Accessory	
Accessory	1 x Power Adapter 1 x US Power cord 1 x Wall mounting bracket 1 x Wall locking bracket 1 x Pan head screws (D6.8, M4*10mm) with washer (D8.1) 4 x Thumb screws (M4*10L) 2 x Pan head screws (D6.85, M4*6mm)
Ordering Information	
Ordering Information	EPD-42T-3 42" E Ink/NXP EMX-IMX7/PCAP/LAN/USB/Front IP65/12V/CE/FCC/Landscape/Portrait