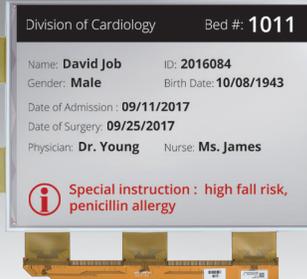


EPD-132,130

13.3" ePaper Wifi/BT Display Module

NEW



Features

- ARM Cortex-M4 Core Processor
- Support IEEE 802.11b/g/n + Bluetooth 4.1 standard
- 13.3" ePaper panel display: EPD-132R for Red/Black/White ,EPD-132B for Black/White
- Rich control I/O : expansion pin header & I2C
- Support operation temperature 0 ~ 40 °C (Red/Black/White) , 0 ~ 50 °C (Black/White)
- High Performance integrated system with RTOS
- Support over-the-air upgrade (OTA)
- Available Case kit for various applications
- Available wall mount kit for various applications

Introduction

EPD132/130 is the module which support ultralow power 2.4GHz RF wireless protocol integrated with 13.3" R/B/W, B/W EPD in ARM Cortex-M4 processor. The module can support hospital, factory, warehouse and retail application. With optimization on the power consumption and device management, your applications with low data rate requirement can be achieved years battery lifetime and hundred devices connection.

Advantech EPD132/130 provide multi interface for application control which is highly integrated with EPD driver and low power consumption system. The model support WIFI/BLE software stack protocol which can easily configure and then join the network. Data can be quickly and easily acquired and transformed into a different format to communicate with ePaper Manager Server and then to other application services. System integration and End system can focus on application development and system management.

EPD-132 Specifications

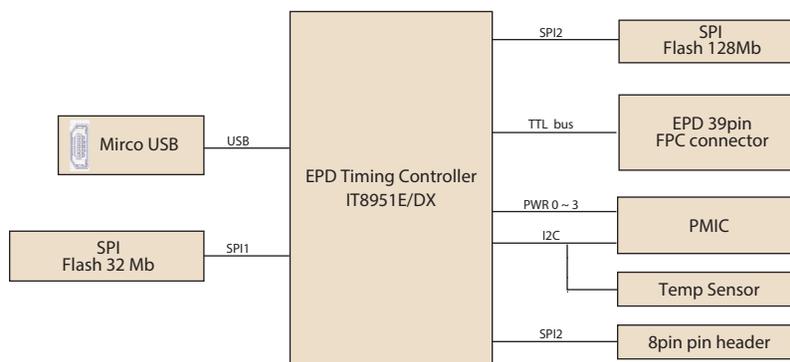
Computing System	MCU	ST 32-bit ARM Cortex-M4 Processor	
	Memory	RAM 256 KB	
Display	Screen Size	285.8 x 213.65 mm	
	Resolution	1600 x 1200 pixels	
Storage	Internal	ITE SPI Flash: 32Mb	
	External	BM22 SPI Flash: 128Mb	
Wireless Network	Standard	IEEE 802.11b/g/n and Bluetooth Low Energy	
	Frequency Band	2.4000-2.4840 GHz for Wi-Fi 2.4000-2.4835 GHz for BLE	
	Channels	1-13 for Wi-Fi & 79 for BLE	
	Channel Separation	5MHz	
	Topology	Star network	
	Transmit Power	Typ. 14 dBm at 802.11b CCK Mode 1M	
		Typ. 12 dBm at 802.11g OFDM Mode 54M Typ. 12 dBm at 802.11n OFDM Mode MCS0 Max 10 dBm for BLE	
	Receiver Sensitivity	Typ. -95dBm at 1 Mbps	
		Typ. -75 dBm at 54 Mbps Typ. -89 dBm at MCS0 Typ. -89 dBm for BLE	
	Function	End node	
Antenna connector	MHF		
Antenna	PCB Antenna		
System Interface	Indicator Button	1 for Reset/ Page Change/Wake-up/Alert cancel	
I/O (on-board)	I2C	4pin Pin Header	
	FFC Connector1 (Alert)	LED/button daughter board	
	FFC Connector2 (FFC_GPIO)	10 port GPIO for system expansion	
	FFC Connector3 (CN8)	UART debug port	
	Switch	Factory mode setting	
	Micro USB (CN2)	USB to TCON (Timing Controller)	Interface for data to EPD
	EPD connector	39P for 13.3" (R/B/W or B/W) & 9.7" EPD (R/B/W)	
Power	DC 5V	Micro USB (CN2) up to 0.9A/4.5 W in USB3.0 host Micro USB (CN3) up to 2A/10 W	In Data transmission mode With Power supply
	Power consumption	Standby : 1.5 mA / 7.5 m.W Application : TBD	
Environment	Operational Temperature	0 ~ 40 °C (R/B/W) , 0 ~ 50 °C (B/W)	
	Non-Operational Temp.	-25 ~ 60 °C (R/B/W) , -25 ~ 70 °C (B/W)	
	Assembly Temperature	10 ~ 40 °C	
	Operating Humidity	5 ~ 85% Relative Humidity, non-condensing	
Outdoor/Indoor Mechanical	Material Type	Metal (NCT)	
	Painting Type	SECC+ Painting	
	Water Proof	IP65 / No water proof connector	
	Dimension	240 x 322 x 60.5 mm/ 240 x 322 x 24 mm	
	Weight	TBD	
Physical Characteristics	Dimensions (W x H)	Panel: 285.8 x 213.65 mm PCBA: 100 x 122 x 3 mm	
	Weight	Panel: 0.12g PCBA: 0.17g	
Operating System		ThreadX v5.6	

EPD-130 Specifications

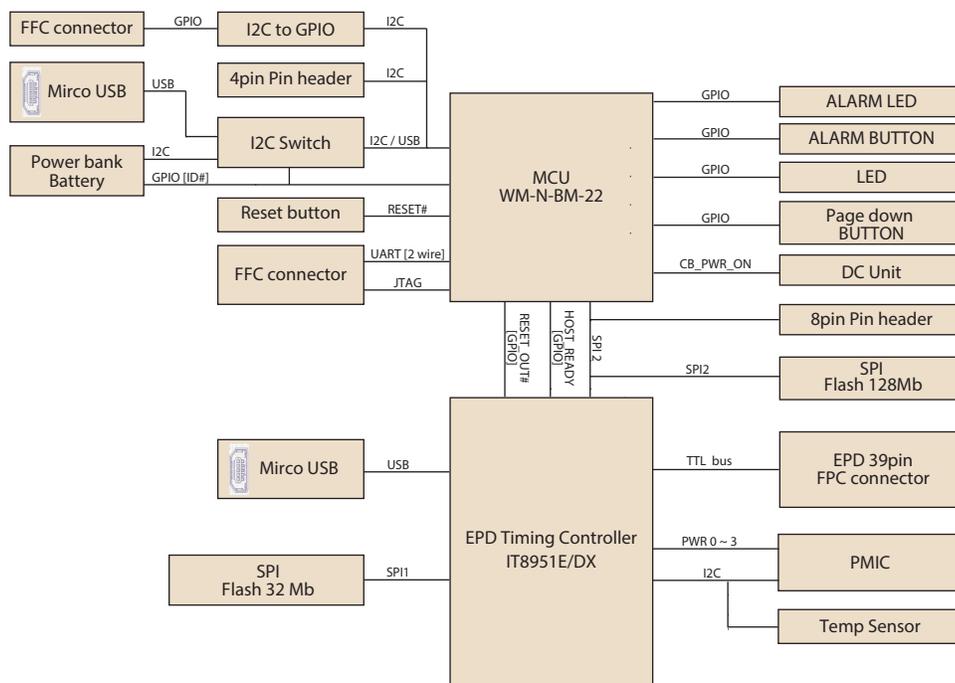
Display	Screen Size	285.8 x 213.65 mm	
	Resolution	1600 x 1200 pixels	
Storage	Internal	ITE SPI Flash: 32Mb	
	External	-	
I/O (on-board)	SPI	8pin Pin Header	
	Micro USB (CN2)	USB to TCON (Timing Controller)	Interface for data to EPD
	EPD connector	39P for 13.3" (R/B/W or B/W) & 9.7" EPD (R/B/W)	
Power	DC 5V	Micro USB (CN2) up to 0.9A/4.5 W in USB3.0 host Micro USB (CN3) up to 2A/10 W	In Data transmission mode With Power supply
	Power consumption	Standby : 1.5 mA / 7.5 m.W Application : TBD	
Environment	Operational Temperature	0 ~ 40 °C (R/B/W) , 0 ~ 50 °C (B/W)	
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Physical Characteristics	Dimensions (W x H)	Panel: 285.8 x 213.65 mm PCBA: 100 x 122 x 3 mm	
	Weight	Panel: 0.12g PCBA: 0.17g	

Board Diagram

EPD-130

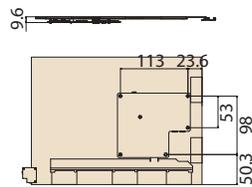
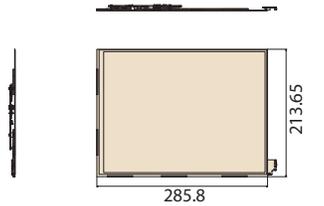


EPD-132

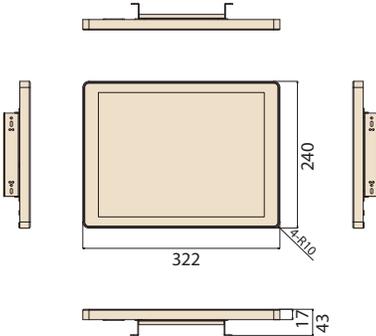


Dimensions

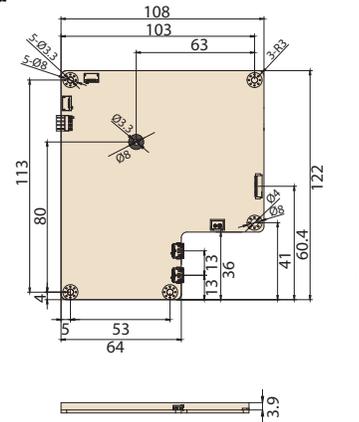
Panel



Indoor system



Control Board



Ordering Information

Part No.	Description
EPD-132R1AG-NSD01	13.3" Red/Black/White ePaper Wi-Fi / BT display module solution in 2.4G
EPD-132B1AG-NSD01	13.3" Black/White ePaper Wi-Fi / BT display module solution in 2.4G
EPD-130B1AG-NSD01	13.3" Black/White ePaper display module
EPD-130R1AG-NSD01	13.3" Red/Black/White ePaper display module
EPD-132R1AG-NSD11	EPD-132R1AG-NSD01 for 50 pcs solution kit
EPD-132R1AG-NSD21	EPD-132R1AG-NSD01 for 100 pcs solution kit
EPD-132R1AG-NSD31	EPD-132R1AG-NSD01 for 500 pcs solution kit
EPD-132R1AG-NSD41	EPD-132R1AG-NSD01 for 1000 pcs solution kit
EPD-132B1AG-NSD11	EPD-132B1AG-NSD01 for 50 pcs solution kit
EPD-132B1AG-NSD21	EPD-132B1AG-NSD01 for 100 pcs solution kit
EPD-132B1AG-NSD31	EPD-132B1AG-NSD01 for 500 pcs solution kit
EPD-132B1AG-NSD41	EPD-132B1AG-NSD01 for 1000 pcs solution kit
EPD-DK132R-FB01	13.3" Red/Black/White ePaper development kit for user wireless download image and control ePaper
EPD-DK132B-FB01	13.3" Black/White ePaper development kit for user wireless download image and control ePaper

Packing List

Model Name	Part No.	Description
EPD-132	EPD-132B1AG-NSD01	1. 13.3" Black/White ePaper 2. ePaper Control Board with Wi-Fi (2.4G) control solution
EPD-132	EPD-132R1AG-NSD01	1. 13.3" Red/Black/White ePaper 2. ePaper Control Board with Wi-Fi (2.4G) control solution
EPD-130	EPD-130B1AG-NSD01	1. 13.3" Black/White ePaper 2. ePaper Control Board
EPD-130	EPD-130R1AG-NSD01	1. 13.3" Red/Black/White ePaper 2. ePaper Control Board
EPD-132	EPD-DK132R-FB01	ePaper display controller x1 ,13.3" red ,black and white ePaper x1, USB cable x2 , 2.4G antenna x1, and ED22 x1
EPD-132	EPD-DK132B-FB01	ePaper display controller x1 ,13.3" black and white ePaper x1, USB cable x2 , 2.4G antenna x1, and ED22 x1

* All Ink Panel inspection criteria refer to Ink CAS & Inspection standard document.

* Note: E Ink Recommend condition for storage:

Temperature: 20 +10 degree C

Humidity : 60% RH+-10%RH, Non-condensing

* Note: If panel module have been put in low temperature between 0--25 degree C for a while, we recommend to leave it between 20 to 30 degree C for 4 days before assembly.

Optional Accessories

Part No.	Description
1700029192-01	With micro-USB connector in 5 V/ 2A
1750008001-01	Wi-Fi dipole antenna, 5dBi 2.4/5GHz
1750006043-01	RF SMA cable, L=150mm
1750008816-01	Antenna magnetic base, L=100mm
1700015038	FPC Cable 10P-0.5mm 7.9cm for DCU2.0
1700029192-01	60cm Micro USB with 5P(M) for power report
9696053RS00	EPD-053R A101-1 daughter board with Switch and LED
XRISC-ADP-10HW-AG	Adaptor A/D 100-240V 10W 5V WM