

EPD-132,130

13.3" e-Paper Wifi/BT Display Module

NEW



Features

- ARM Cortex-M4 Core Processor
- Support IEEE 802.11b/g/n + Bluetooth 4.1 standard
- 13.3" e-Paper panel display
- Rich control I/O : expansion pin header & I2C
- Support temperature 0 ~ 50 °C
- 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

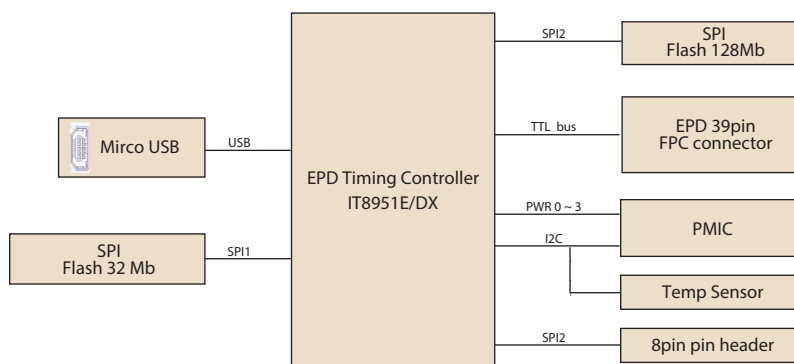
Computing System	MCU	ST 32-bit ARM Cortex-M4 Processor	
	Memory	RAM 256 KB	
Display	Screen Size	285.8 x 213.65 mm	
	Resolution	1600 x 1200 pixels	
	Touch Type	-	
Storage	Internal	ITE SPI Flash: 32Mb	
	External	BM22 SPI Flash: 128Mb	
Audio		-	
Wireless Network	Standard	IEEE 802.11b/g/n and Bluetooth Low 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
	RF Data Rate	Up to 65Mbps	
	Function	End node	
	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) 34P for 6" EPD (TBD)	
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	
	Operating Humidity	5 ~ 80% Relative Humidity, non-condensing	
Outdoor Mechanical	Material Type	Metal (NCT)	
	Painting Type	SECC+ Painting	
	Water Proof	TBD	
	Dimension	TBD	
	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	
	Touch Type	-	
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) 34P for 6" EPD (TBD)	
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	
	Operating Humidity	5 ~ 80% Relative Humidity, non-condensing	
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

