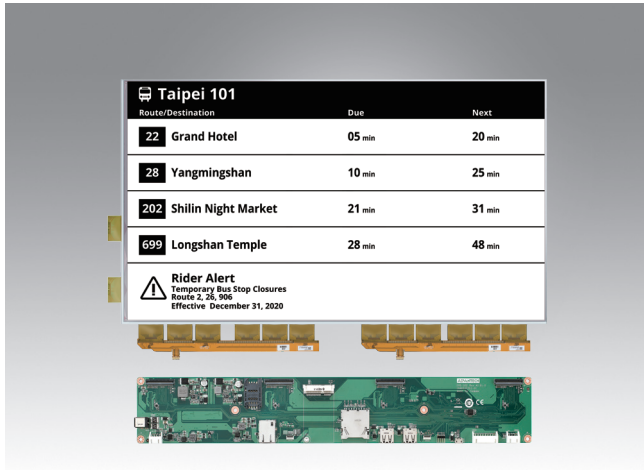# EPD-320M

31.2" ePaper Display Driving Board

Features

- ARM Cortex-M7 Core Processor

- 31.2" ePaper panel display: EPD-320MF for 4096 colors, EPD-320MB for 16-levels gray scale

- Supports operation temperatures of 0 ~ 40 °C (Color Filter), 0 ~ 50 °C (16-level gray scale)

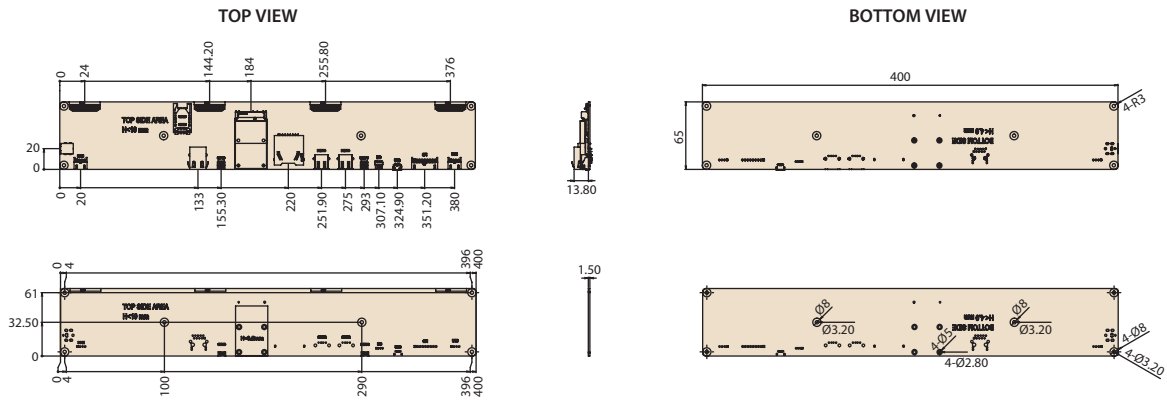- Wide range temperature from -15 to 65 °C

Introduction

EPD-320 the ultra-low power design integrated with 31.2" B/W EPD and 4096 colors filter in an ARM Cortex-M7 processor. The module can support hospital, factory, warehouse and retail applications. Advantech EPD-322 provides multiple interfaces for application control which are highly integrated with the EPD driver and offer a low power consumption system. The model supports the Wi-Fi / LAN in EPD-322, 4G/LTE in EPD-327. Data can be easily acquired and transformed into a different format to communicate with the ePaper Manager Server and then for other application services. System integrators can focus on application development and system management.

EPD-320 Specifications (for EPD Driving Board only)

Computing System	MCU	32-bit Arm® Cortex®-M7 480MHz MCUs, 128 KB Flash
	Memory	1MB RAM
Display	Screen Size	697.2(H) × 402.8(V) mm
	Resolution	2560 x 1440 pixels for 16 gray level 1280 x 720 pixels for 4096 Color filter
I/O (on-board)	Power connector	
	USB	USB for host control
	EPD connector	50P for ePaper connector
Power	DC 12V	
	Power consumption	-System change 1pc image: spend 276mA on EPD-320 driving board, -System stay power saving mode: spend 39 mA on EPD-320 driving board
Environment	Operational Temperature	0 ~ 50 °C (B/W) Wide Range Temperature version in -15 to 65 °C in 1 bits color
	Non-Operational Temp.	-25 ~ 70 °C (B/W)
	Assembly Temperature	10 ~ 40 °C
	Operating Humidity	5 ~ 85% Relative Humidity, non-condensing
Housing Mechanical	Material Type	Metal (NCT)
	Painting Type	SECC+ Painting
	Dimension	240 x 322 x 60.5 mm/ 240 x 322 x 24 mm
	Weight	1.3kg
Physical Characteristics	Dimensions (W x H)	PCBA: 400 x 61mm
	Weight	TBD

Dimensions

TOP VIEW

BOTTOM VIEW

Ordering Information

Part No.	Description
EPD-320B1AG-NSD01	31.2" 16 gray level ePaper driving board module
EPD-320F1AG-NSD01	31.2" 4096 color filter ePaper driving board module

Optional Accessories

Part No.	Description
96PSA-A36W12R1	ADP A/D 100-240V 36W 12V
1750008001-01	Antenna 2.4Ghz
196xxxxxxxx	Mounting BKT

Packing List

Model Name	Part No.	Description
EPD-320M	EPD-320B1AG-NSD01/ EPD-320F1AG-NSD01	EPD control board x 1pc, Adaptor x 1pc

* All Eink Panel inspection criteria refer to Eink 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 has been put in low temperature between 0~-25 degree C for a
   while, we recommend leaving it between 20 to 30 degree C for 4 days before assembly.