



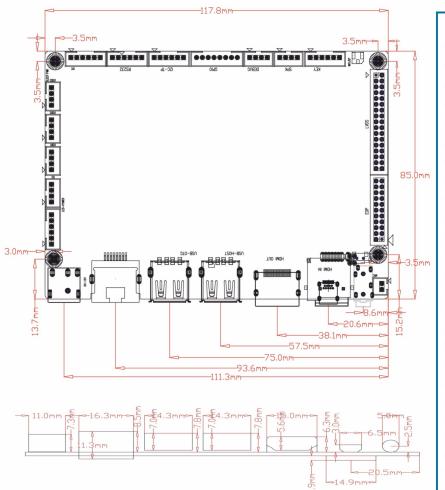
# Model No. **EMB-1800-L-CT V2.8**

## **EMBEDDED BOARD**

FUNCTIONAL DRAFT SPECIFICATION (This document is meant for customers' approval)

# **Specification**

Model No.	EMB-1800-L-CT V2.8
CPU	2660 ARM Cortex-A17 32-bit
Speed	1.8GHz
GPU	Mail-T764 GPU MP4 quad-core GPU
	stand by Open GL ES1.1 / 2.0 / 3.0, Open VG1.1, Open CL, DX11,stand by AFBC
	(Frame buffer compression)
Ram	DDR3 2G (up to 4G)
Built-in storage capacity	eMMC 8GB (16G / 32G / 64G / 128G optional) TF Card expansion
The internet	Ethernet 10 / 100 / 1000 Mbps, stand by Ethernet, POE power supply (optional)
	It supports 2.4G Wi-Fi, supports Wi-Fi 802.11b / g / n protocol, 5G Wi-Fi (optional)
	Bluetooth-enabled, V2.1 + EDR / Bluetooth 3.0 / 3.0 + HS / 4.0
Display interface	1 * eDP interface (EDP1.3, 4lanes with 2.7Gbps), stand by 5V / 12V powered by
	1 * LVDS Interface (Single / Dual, 6 Place / 8 Bit), stand by 7 "-108" Display 1080P 60Hz
	Export, stand by 3.3V / 5V / 12V powered by
	1 * HDMI 2.0 stand by 4K 60Hz Export Supports dual display function different
Onboard backlight	Support 12V backlight power supply
Image rotation	Support 0 degrees, 90 degrees, 180 degrees, 270 degrees manual rotation, gravity
	sensor support automatic transfer screen function (Optional)
Audio frequency	1 * Speaker output (2 * 6W 4R THD<10%)
	1 * Headphone output (input with headset)
	1 * Microphone input
Touch screen	2 * I2C Interface (supports multi resistive touch, capacitive multi-touch) support
	USB Multi-point infrared touch, capacitive multi-touch, Multi-film touch nano,
	Acoustic multi-touch, multi-touch, etc. Optical
Camera	Support 800W-USB interface to camera
RTC	Real-time clock battery supply real timer switch (reducing power consumption
	than the market increases the stability of the assumed switch)
USB	4 * USB-2.0 HOST, 1 * USB-OTG default HOST
Infrared	1 * Infrared receiver seat, Support infrared remote control function
Led	* A strong state power LED (red), the LED system 1 * (blue, default flashing)
Button	1 * reset key, a power key *, a * upgrade key (2 * AD Another input to spare)
Serial ports	2 * RS232, 1* UART TTL
IO mouth	6 * IO ports, support for input or output
SPI mouth	1 * SPI ports, support for SPI devices
Power adapter	Input : AC100-240V.50-60HZ, Output : 12V DC / 5.5mm DC head 2A-5A
	Warning: ( claim surge voltage is less than 18V, the ripple voltage is less than 100mV)



#### **Precautions**

- \* Relative Humidity : ≤80%
- \* Storage temperature : 0 ~ 60 °C
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- \* Keep the card away from static electricity.
- \* Do not subject to heavy pressure and bending deformation, drop
- \* If the board is dusty, wipe with a dry cloth.
- \* When the board is operating on-board do not fall into the conductive object, the board is powered and do not put a metal table
- \*on Selection is recommended to use the power 12V / 3A Such as peripherals recommended more use 12V / 5A peripheral devices to the motherboard power required by the motherboard, the individual device current is less than 500mA. Taken to ensure that the board is powered before the power supply voltage is in the range of claims, the power supply wiring is correct, the display screen and the line voltage is correct jumper connection socket and each of the sub-connection pins are correct and, in the power supply voltage to ensure that all and a sub-wiring connection socket completely correct use of the case before the energization.

### **Basic Software Specifications**

Operating system	Linux (18.04) with kernel version 4.4.154
Audio frequency	MP3, WMA, WAV, APE, FLAC, AAC, OGG, M4A, 3GPP Other formats
Video	Stand byh.265, H.264, VP8, MAV, WMV, AVS, H.263, MPEG4 And other visual
	Frequency format 1080p / 2160P Multiple video decoding
Image	Stand by JPG, BMP, PNG And other image formats browsing and support
	rotation / Slide show
	Put / Picture zoom function
The system comes with	APK installer, e-mail, calculator, browser, tape recorder, calendar, settings, clock,
application software	video Player, search, address book, gallery, download, camera, music, Explorer
Language support	Multi-lingual
Input	Standard Keyboard, an optional third-party input method (Chinese, Korean, Japanese,
	etc.)
System management	The original ecology System, open root Permissions can be customized product
	development
	Real-time remote monitoring, recovery from system crashes, 7 * 24 Hour unattended
	Stand by OTA Remote upgrade
	Stand by Wi-Fi display
System watchdogs	Watchdog system support software watchdog



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