

PPC-4510

HIO i.MX6 10.1" PC Quick Setup Guide



Package Include:

- 1 x HIO-EMB-1200 Core Board
- 1 x HIO-PIO-1200 Carrier Board
- 1 x 10.1" Touch Panel (1280 x 720 px)
- 1 x WiFi Module and Antenna
- 1 x 12V Adapter

Safety Warning

The use and installation of this system should only be performed by professionals. Improper installation of any electronic device or electrical component can result in serious injury or death. Please make sure that all safety precautions are taken into account.

Static-Sensitive Devices

Electrostatic-Discharge (ESD) can damage electronic components. To avoid damaging your system board, it is important to handle it very carefully. The following measures are generally sufficient to protect your equipment from ESD.

Precautions

- Use a grounded wrist strap designed to prevent static discharge.
- Touch a grounded metal object before removing the board from the antistatic bag.
- Handle the board by its edges only; do not touch its components, peripheral chips, memory modules or gold contacts.
- When handling chips or modules, avoid touching their pins.
- Put the motherboard and peripherals back into their antistatic bags when not in use.

HIO-EMB-1200 Core Board Layout

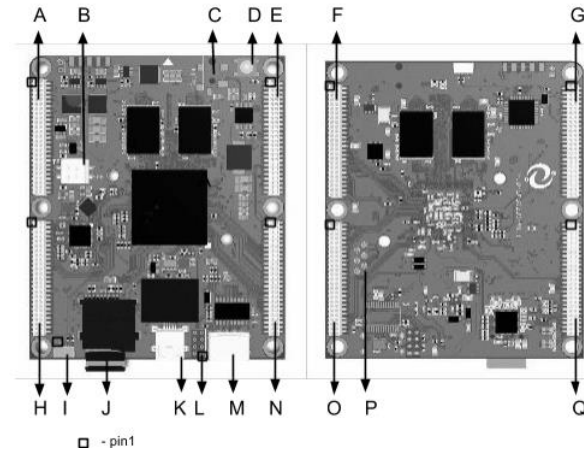


Figure 2: HIO-EMB-1200 Core Board

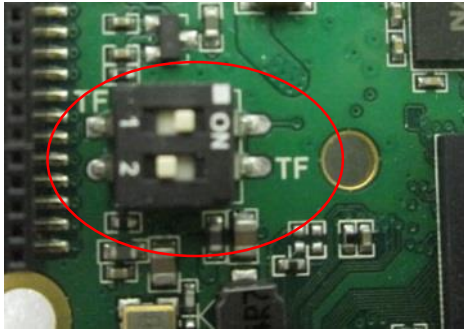
Item	Connector	Description
A	J606 (top of J600)	Power, RTC and 24bit parallel display port
B	DIP Switch	2-bit DIP switch for boot selection TF/iNAND
C	DC Jack	5V DC Jack
D	Power Button	
E	J608 (Top of J602)	LVDS, UARTs, CAN, I2C, GPIOs, VDD, VCC
F	J602 (Bottom of J608)	LVDS, UARTs, CAN, I2C, GPIOs, VDD, VCC
G	J600 (Bottom of 606)	Power and 24bit parellel display port
H	J607 (Top of J601)	Audio, USB, SDIO, Ethernet, I2C and SPI
I	Console UART	TTL serial port
J	SD Card Socket	Micro SD socket
K	OTG	OTG Device only
L	USB	2x USB 2.0 headers
M	Mini HDMI	HDMI with audio
N	J609 (top of J603)	GPIO, I2C, PCIe PH, MIPI DSI, CSI, Camera
O	J603 (Bottom of J609)	GPIO, I2C, PCIe PH, MIPI DSI, CSI, Camera
P	JTAG	
Q	J601 (Bottom of J607)	Audio, USB, SDIO, Ethernet, I2C, and SPI

Boot Up:

Boot Selection from the HIO-EMB-1200 Board

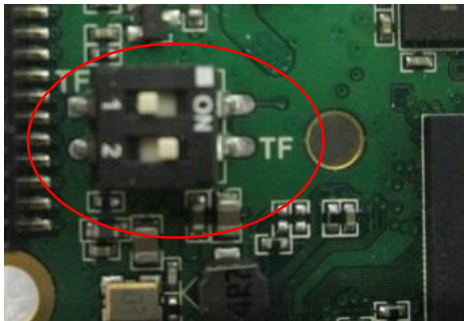
- On the HIO Board, there is a switch with 2 selections, "1" (Default) and "2"

#1 (Default) : To boot from the iNAND (Default OS Yocto Qt FB)



#2 : To boot from the TF (SD Card)

- To build HIO-Yocto Image, Please visit wiki.hioproject.org
- The machine variable for the HIO i.MX6 10.1" Panel PC is **hio-imx6dl-ppc4510**
- Plug Yocto Build Micro SD Card into the SD Card Slot
- Switch to number 2 on



- Insert Molex Connector into the power Adapter and plug into the Power slot
- Machine will boot up and prompt to Enter Login Name
- Enter "**root**" for Login Name

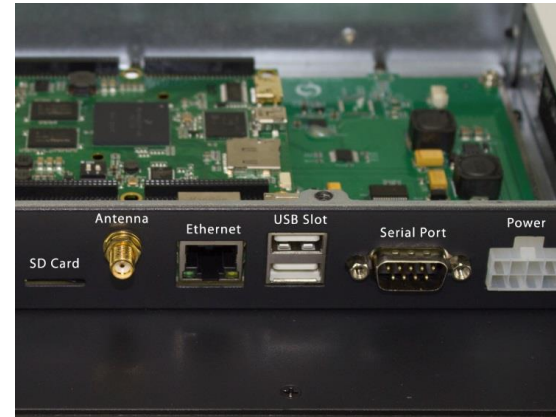


Figure 3: Side View

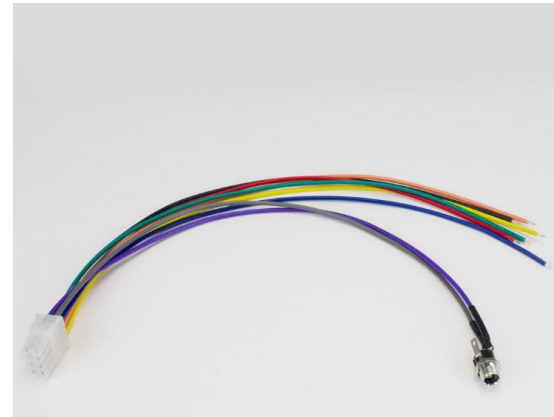


Figure 4: Molex Connector

Molex Connector Pin Layout			
8	7	6	5
4	3	2	1

Wire	Pin	Function
Yellow	1	GND
Orange	2	TX
Blue	3	Reserved
Gray	4	VCC (24V)
Red	5	SHIELD
Black	6	RX
Green	7	Reserved
Purple	8	GND