

# EMB-7510

Embedded Industrial Motherboard Based on NXP i.MX8M ARM Architecture



**Product :**

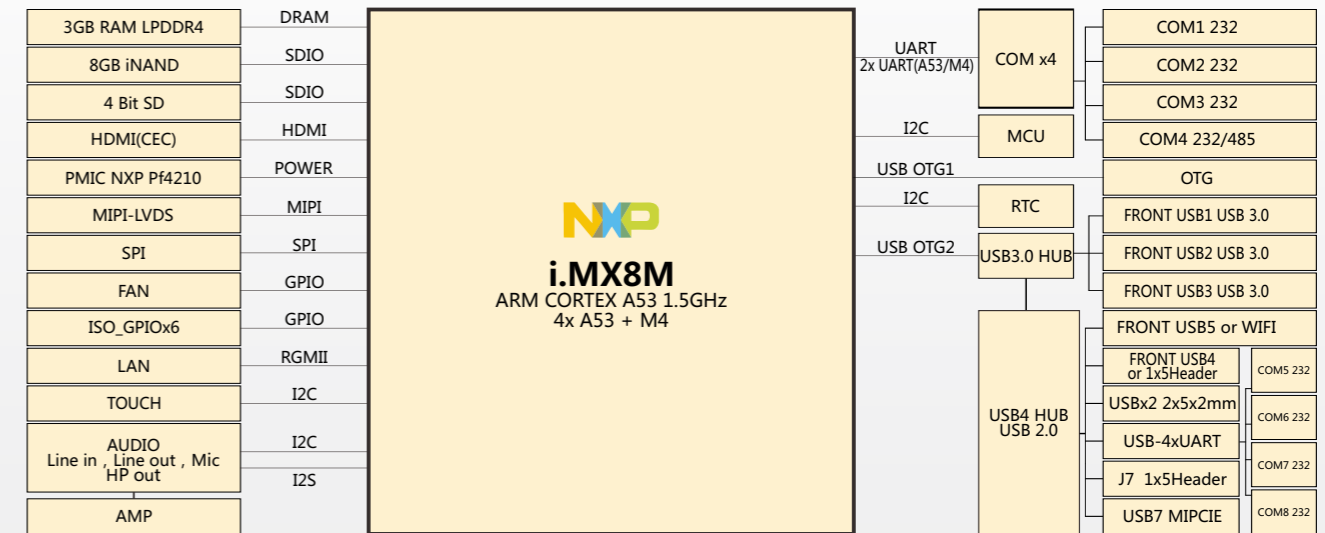
- ◆ Based on NXP I.MX8M processor
- ◆ On board 3GB LPDDR4 memory , and 8/16/32/64/128GB iNAND Flash
- ◆ Support 1x HDMI , 1x LVDS display port , and independent dual display
- ◆ Provide 8x COM , 3x USB3.0 , 5x USB2.0 , 1x USB OTG
- ◆ 1x LAN , on board WiFi , 2x CAN , 1x Line out , 1x Mic in , 6W power amplifier
- ◆ Provide 1x MINI PCIe ( support 4G module ) ; 1x SIM card slot
- ◆ Compact structure and high integration of the whole board , size : 200mmx 140mm



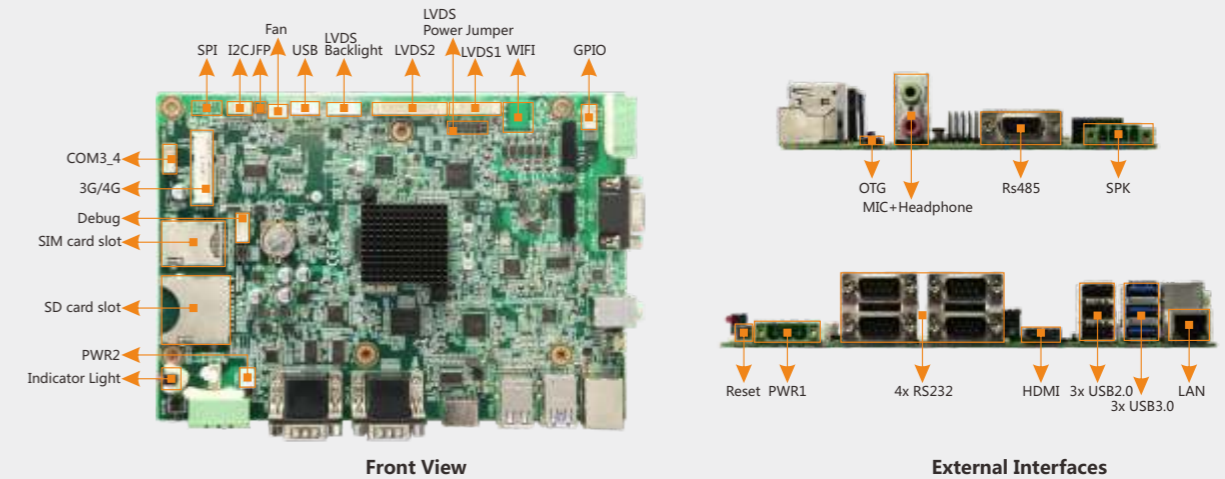
**Specification :**

Model		EMB-7510
Processor	CPU	NXP i.MX 8M quad core 4x Cortex-A53+ M4 1.5GHZ
	GPU	CPU integrated
Memory	Capacity	On board 3GB
	Technology	LPDDR4
	Flash	Standard 16GB EMMC , 8GB/16GB/32GB/64GB/128GB optional , 32MB QSPI
Graphics	LVDS	1x dual channel LVDS , maximum resolution supported : 1920x 1080@60Hz
	HDMI	1x HDMI , maximum resolution supported : 4K@60Hz
Ethernet	LAN	1x LAN(RJ45).10/100/1000 Mbps
	WIFI	Support 2.4G/5G , default 2.4G
	Bluetooth	Optional
Function	Audio	Line out+ MIC in , support 6W、8Ω power amplifier
	FNA	1x FAN (1x3PIN connector)
	USB	3x USB 3.0 , 5x USB 2.0 , 1x Micro OTG
	COM	2x Debug , 5x RS232 , 1x RS232/485
	I/O	16x GPIO , 3x GPO ( isolated ) , 3x GPI ( isolated )
I/O	Touch	Support
	Can	2x CAN BUS
	Buttom	Reset Key , Power Key
	Expansion	Mini PCIe
Expansion	SD Socket	1x TF card slot
	SIM Slot	1x SIM cardslot
	WatchDog Timer	WatchDog Timer
Power	Power Supply Voltage	+12V
	Power Type	DC -IN
	Max Power Consumption	7W
Reliability	Operating Temperature	-20°C ~ 70°C
	Storage Temperature	-40°C ~ 85°C
	Operating Humidity	5% ~ 95% RH , non-condensing
Mechanical	Dimensions(Wx D)	200mmx 140 mm
Operation System	Supported OS	Android/Linux

**Structured Flowchart :**



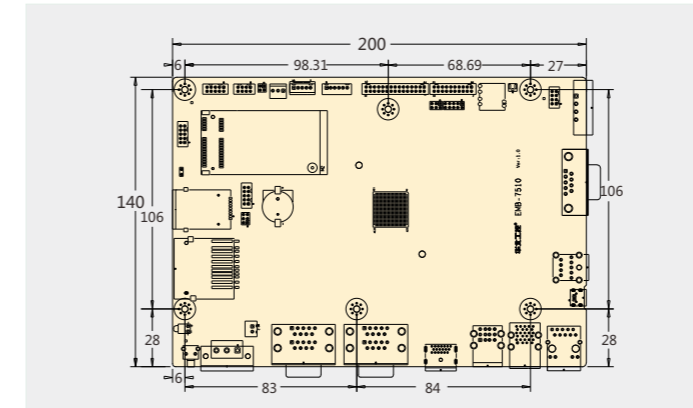
**Interfaces :**



**Ordering Information :**

Option	CPU	Memory	Flash	Display Port		LAN	COM	USB			Expansion			WIFI	Bluetooth	P/N
				LVDS	HDMI			USB3.0	USB2.0	OTG	MINI PCIe	TF Card Slot	SIM Card Slot			
1	IMX8MQ	3GB	16GB	1	1	1	8	3	5	1	√	√	√	x	x	2.13.0751010009

**Dimension :**



**Optional Accessories :**

Optional Accessories	Description	P/N
Power line A	Power adapter aviation connector	5.72.0890140009