

3.5" Motherboard Based on NXP i.MX 6 Series Processors

- NXP i.MX 6DualLite 1.0GHz/6Quad 1.0GHz (NXP i.MX 6Solo/NXP i.MX 6Dual optional)
- Onboard DDR3 1066MHz 1GB memory and 8GB eMMC Nand Flash (default)
- Supports Triple Display: VGA/HDMI/LVDS
- · Supports 1x Mini-PCle, 4x RS232, 1x RS485, 5x USB2.0, 2x CAN, 1x SIM, 1x Micro SD slot
- 3.5 inch mini size, low power consumption
- Supports Yocto 2.5.2, Android 9.0, Ubuntu 16.04









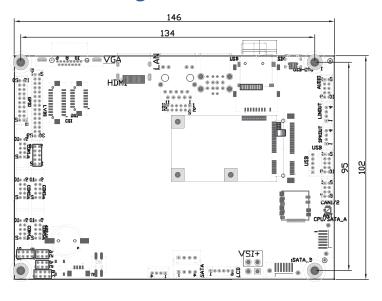


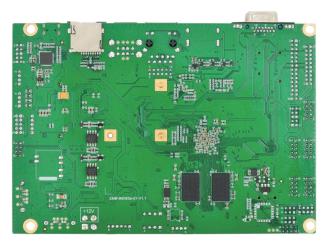






Structure Diagram





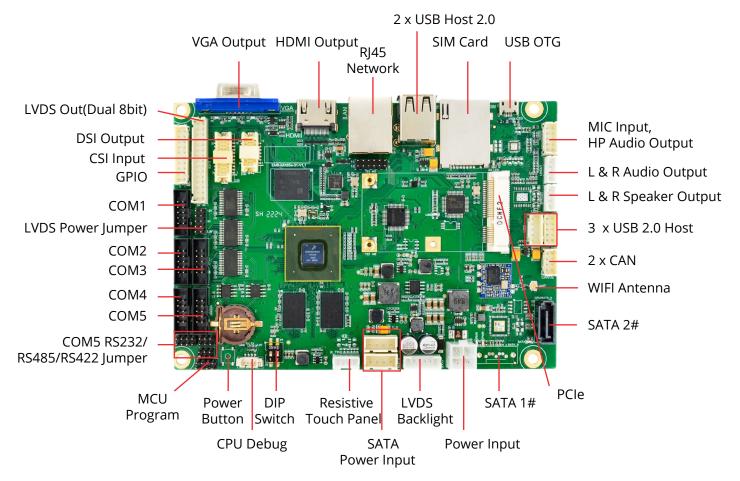
Ordering Information

Part Number	CPU	RAM	Storage	Display	GbE	USB	Audio	Mini-PCle	SATA	Operating Temp
EMB-iMX6Se-01	NXP i.MX 6DualLite 1.0GHz /6Quad 1.0GHz	1GB DDR3	8GB eMMC	HDMI + VGA + LVDS	1	5 USB 2.0 1 Mcro USB	1	1	2	6DualLite: 0℃ to +60℃ 6Quad: -20℃ to +70℃

Technical Specification:

System						
Processor	NXP i.MX 6DualLite 1.0GHz (Commercial) or i.MX 6Quad 1.0GHz (Extended Commercial)					
	NXP i.MX 6Solo/i.MX 6Dual optional					
Architecture	ARM Cortex-A9					
Memory	Onboard 1GB DDR3(Default), up to 2GB					
Storage	eMMC 8GB (Default),16GB/32GB (optional)					
Operating System	Yocto 2.5.2, Android 9.0, Ubuntu 16.04					
Communication						
LAN	1 x 10Mbps/100Mbps/1000Mbps RJ45 port					
WiFi	1 x RTL8188WEUS					
Bluetooth	1 x RTL8723 (optional)					
Expansion Interfaces						
Expansion Slots	1 x Mini-PCle with SIM Card Slot					
Internal Headers						
Internal Display	1 x Dual channel 8bit LVDS (expansion header)					
Expansion Headers	2 x SATA and SATA Power Input					
	1 x DSI					
	1 x CSI					
	4 x RS232, 1 x RS232/RS422/RS485					
	3 x USB2.0					
	1 x Power					
	1 x GPIO					
	2 x CAN					
	1 x SPK(L&R)					
	1 x Audio(Mic In , HP Out, Line In)					
	1 x RTP(4wire TouchPanel)					
	1 x RTC					
External Connectors						
External Display	1 x VGA, 1 x HDMI					
Network	1 x RJ45 AR8033					
USB Host	2 x USB 2.0					
SIM Card Slot	1 x SIM					
SD Card Slot	1 x Micro SD card slot					
USB OTG	1 x Micro USB					
Audio						
Audio Codec	NS4258T (optional ALC5640)					
Power Supply						
Power Input	12V DC					
Power Consumption	Depending on Configuration					
Mechanical & Environ	ment					
Dimensions	146mm x 102mm x 1.6mm					
Weight	115g					
Temperature	Commercial: 0 °C to +70 °C, Extended Commercial: -20 °C to +70 °C, Industrial: -40 °C to +85 °C					
Relative Humidity	10% to 90%, non-condensing					
MTBF	>100 000 Hours					
Shock	50G/25ms					

Interface Diagram:





As a board level and system level designer and manufacturer, Polyhex, with 9- year experience, always delivers best-in-class embedded computing solutions based on both ARM and X86 architecture, including hardware customization and software debugging etc. Partnered with silicon vendors like Intel, NXP, ST, Rockchip, Allwinner and so on, we have earned trust from clients worldwide in over 30 countries. Polyhex is also certified with ISO9001 and ISO13485 for the self-owned manufacture facility.



