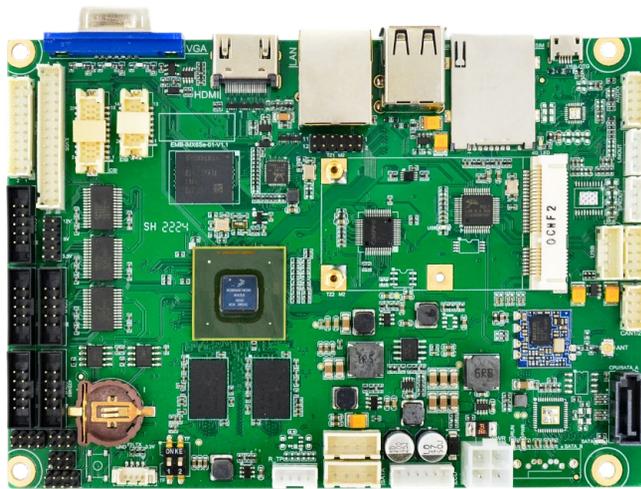


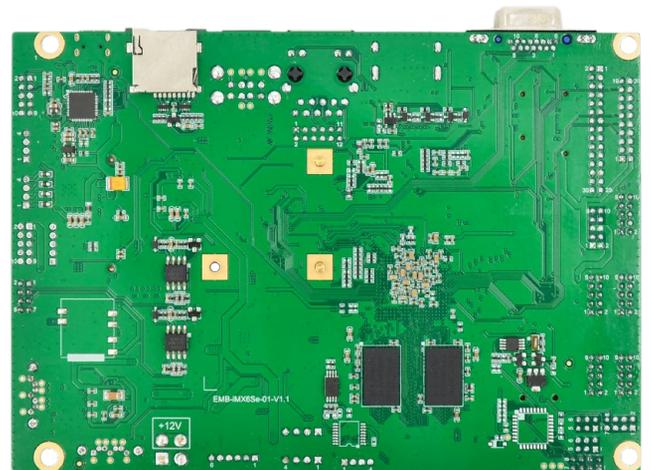
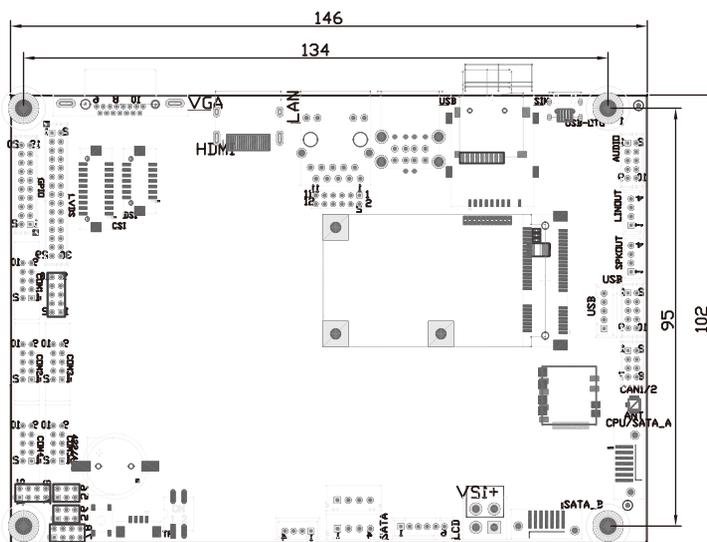


## 3.5" Motherboard Based on NXP i.MX 6 Series Processors

- 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



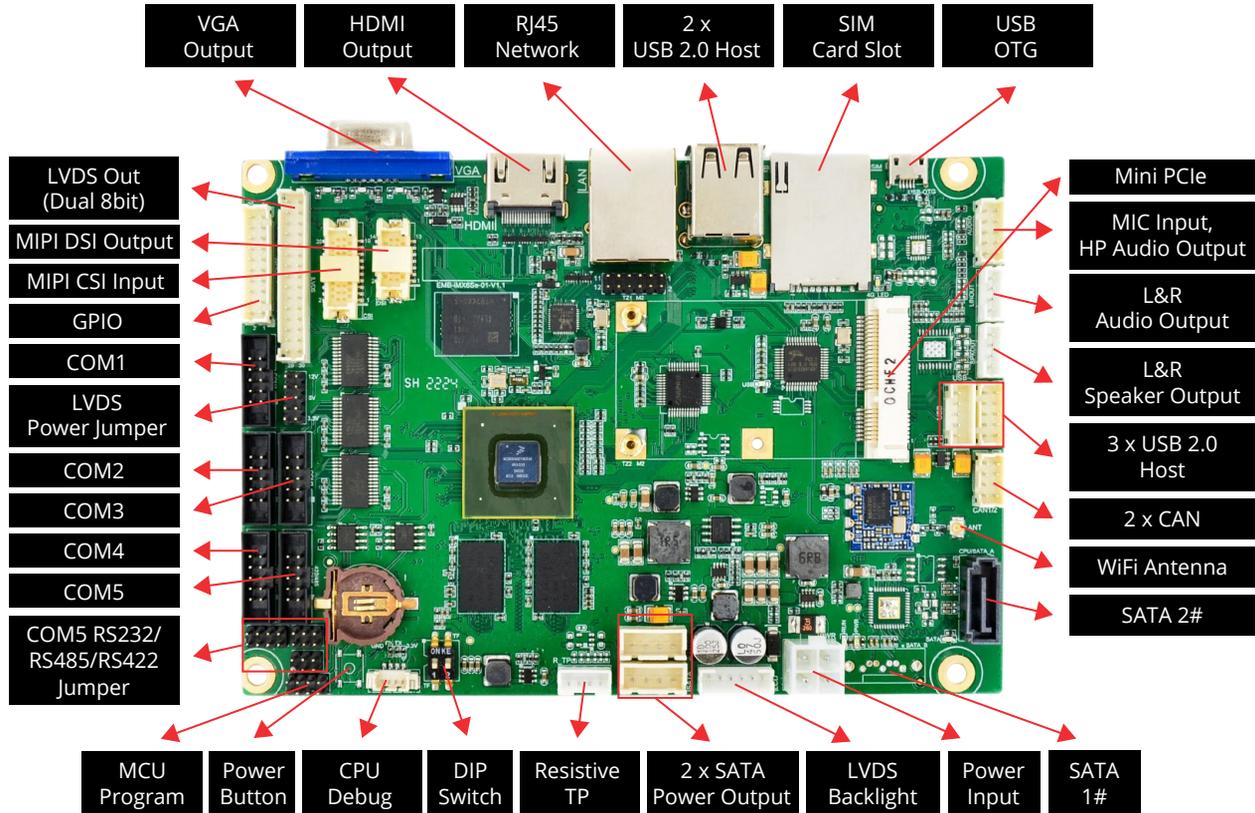
### Ordering Information

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 Micro USB	1	1	2	6DualLite: 0°C to +60°C 6Quad: -20°C to +70°C

## 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-PCIe with SIM Card Slot
Internal Headers	
Internal Display	1 x Dual channel 8bit LVDS (expansion header)
Expansion Headers	2 x SATA and SATA Power Output 1 x MIPI DSI 1 x MIPI 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 & Environment	
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
Vibration	20G/0-600Hz

Interface Diagram:



**ABOUT POLYHEX**

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.

