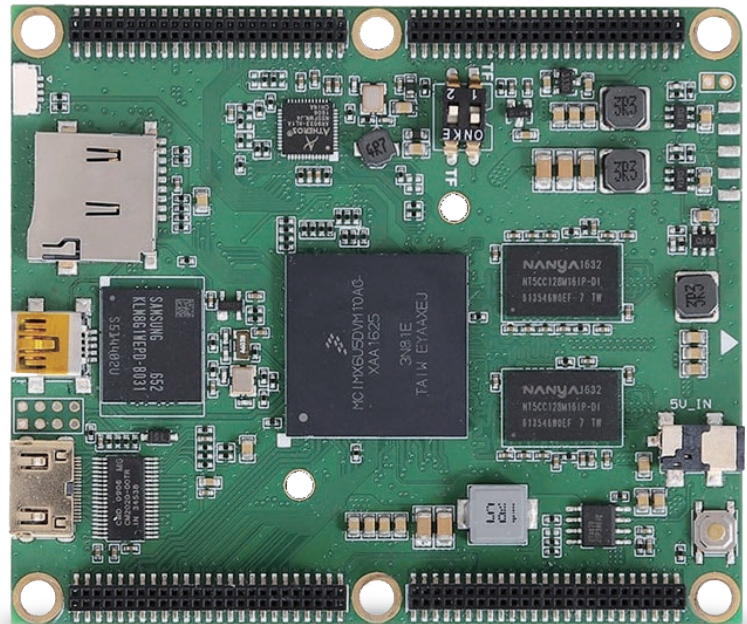




System on Module Based on NXP i.MX 6 Series CPU

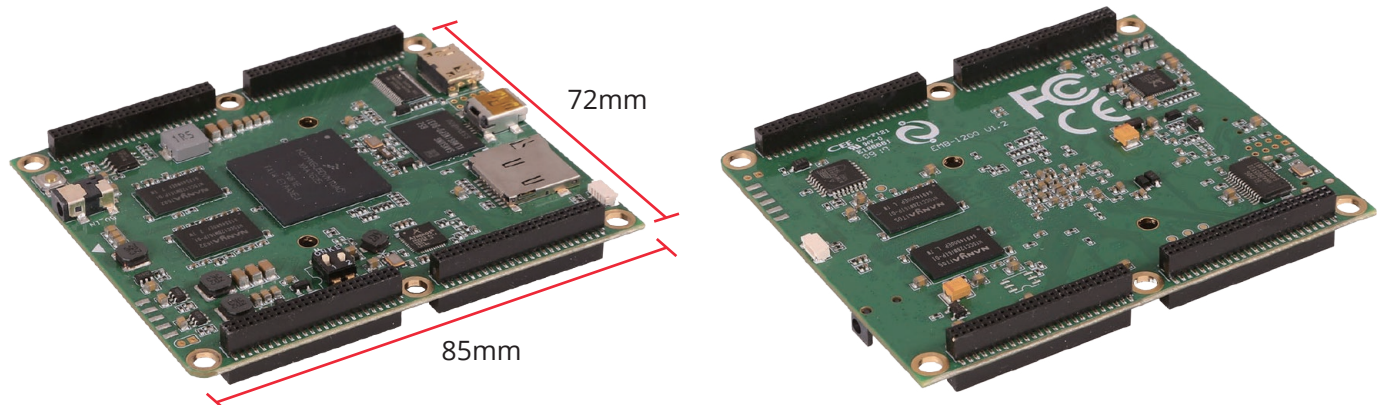
Features:

- Onboard NXP i.MX6 DualLite CPU (i.MX 6Quad optional)
- Onboard 1GB DDR3 RAM (2GB/4GB optional)
- 1 x HDMI
- 1 x micro SD socket
- 2 x USB 2.0, 1x OTG (Device)
- 1 x UART Console
- 1 x onboard audio codec with 1W AMP
- 1 x GbE PHY
- 8 x 50pin female header
- Size: 72 x 80mm



Board Description:

The SOM-iMX6Se is ultra small form factor embedded core board based on NXP i.MX 6DualLite CPU/NXP i.MX 6Quad CPU. It has an NXP i.MX 6DL or i.MX 6Q onboard with onboard DDR3 memory and eMMC storage. The I/O interfaces include: HDMI, USB2.0, micro SD slot, serial console, OTG and 200 pin headers on the top and bottom to bring out all the display ports, camera ports, CAN, serial, I2C, SPI, SDIO and more i.MX6 I/O resources. The SOM can be equipped with a variety of daughter boards in a vertical top and bottom fashion, with wing-type modules or a carrier board.



Specification:

System	
Processor	NXP i.MX 6DualLite (i.MX 6Quad optional)
Core	Cortex-A9 dual core (i.MX6DL) or Cortex-A9 quad core (i.MX6Q)
System Memory	64bit 1GB DDR3 SDRAM
Ethernet	Onboard Gigabit Ethernet PHY
Storage	8GB eMMC, up to 128GB
Operation System	Yocto 2.5.2, Ubuntu 18.04 server, Android 10.0
Graphic	
Graphic Controller	Vivante GC 880 + Vivante GC 320 (i.MX6DL)
	Vivante GC 2000 + Vivante GC 355 + Vivante GC 320 (i.MX6Q)
Display Interface	1 x mini HDMI
Display Resolution	HDMI 1920 x 1080
I/O	
SD Card Socket	1 x micro SD Socket (not support hot plug)
USB	2 x 4pin 2.0mm pitch USB 2.0 pin headers
Boot Switch	1 x 2bit DIP switch for iNAND and micro SD boot selection
Power Switch	1 x onboard power switch
Console Port	1 x 4pin TTL serial port
Power Input	1 x 5V/2A DC power input, 2.5mm OD, 0.7mm ID
OTG	1 x OTG
Expansion	4 x 50pin 1.27mm pitch top and bottom I/O expansion. 200pin top and bottom female headers offers: 24bit Parallel Display Port, dual channel 24bit LVDS, MIPI DSI up to 24bit, MIPI CSI up to 4 lane, 8bit parallel camera interface, GbE PHY, x1 PCIe PHY, 2 x USB 2.0, I2S audio codec output with Lineout/detect, Lineout, Micin/detect, speaker out (1W), 4bit SDIO, IOMUX outputs: up to 5 x UART, 2 x CAN, 3 x SPI, 3 x I2C, 34 configurable GPIO
Mechanical & Environmental	
Operating Temp.	-10° C ~ 50° C
Storage Temp.	-40° C ~ 85° C
Operating Humidity	5%~ 95%, 40°C, noncondensing
Dimensions	85 x 72 mm (3.34" x 2.84")

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.

