POLYHEX

NXP i.MX 6UL Cotex-A7 based Development Kit

System-on-Module *SOM-NMX6UL* and Base Board *BSB-NMX6UL*

The SOM-NMX6UL is a highly flexible System-on-Module (SoM) based on NXP i.MX 6UltraLite Cortex-A7 processor with 528MHz CPU Clock. It is a power-optimized cost-effective SOM that perfectly fits various embedded and industrial products and segment. The SOM-NMX6UL provides a variety of interfaces and connectivity options -all packaged at an optimized power, size and cost. This superior price/performance offering is ideal for fast emerging applications such as Internet-of-Things (IoT), as well as other portable and battery-operated embedded systems.

The highly integrated connectivity includes dual Ethernet, serial, GPIO, CAN, LCD with touch panel and camera interfaces. In addition, the system supports industrial operating grade, targeting embedded application requiring a wide temperature range.

Polyhex also provides a complete hardware and software development kit (DVK) for the SoM in the form of a carrier board with double row 2*20pins edge connector for the SOM-NMX6UL and more accessories such as LCD display and touch panel. The base board is ideal not only as reference for the customer to develop its own custom board but also as a cost-effective solution for production.

NXP

NXP i.MX6UL Cotex-A7

OS

Linux/QT5 4.1.15
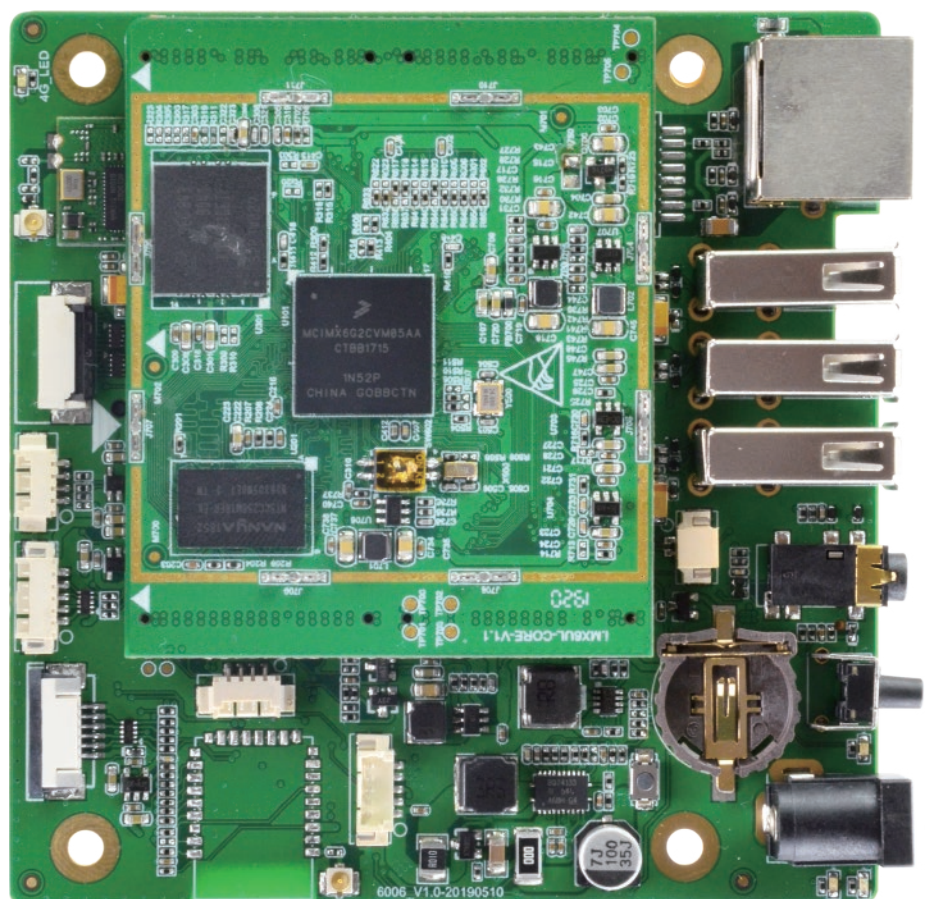
Model Number: SOM-NMX6UL

Main Features:

· NXP i.MX 6UltraLite ARM Cortex-A7 528Mhz CPU
· Onboard 256MB RAM (512MB/1GB optional)
· Onboard 4GB eMMC (8GB/16GB/32GB/64GB optional)
· Supports Linux 4.1.15
· Other Interfaces: Dual ethernet, Dual CAN, I2C, SPI, GPIO, Serial, ADC, PWM

Technical Specifications:

i.MX6UL System-on-Module		
Hardware	CPU	NXP i.MX 6UL CPU MCIMX6G2CVM05AB (default)
	RAM	Onboard 256MB DDR3 RAM (512MB/1GB optional)
	eMMC	Onboard 4GB (8GB/16GB/32GB/64GB optional)
OS	Kernel	4.1.15
	OS	Linux/QT5
Connectivity	LAN	2 Ethernet, supporting MII/RMII
	GPIO	Up to 106 GPIO
	Serial	Up to 8 serial ports
	I2C	Up to 4 I2C
	CAN	Up to 2 CAN
	SPI	Up to 4 SPI
	ADC	Up to 10 ADC
	PWM	Up to 8 PWM
	I2S	Up to 3 I2S
	Camera	1 8bit parallel camera port
	JTAG	1 JTAG debug port
	LCD	1 24bit RGB LCD panel port
Power	Input Voltage	Average 5V, 3.3V to 6.1V
	Input Current	110mA, Max. 250mA
	Power Consumption	Average 0.55W, Max. 1.25W
Structure	Dimension	65mm(L)*54mm(W)*9mm(H)
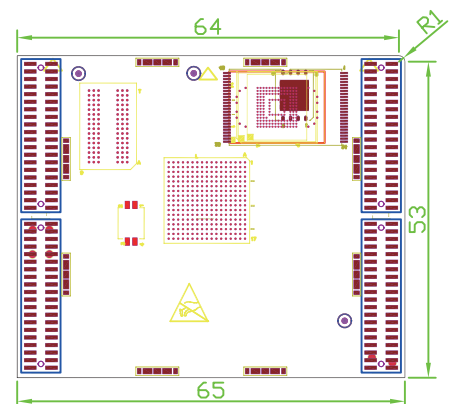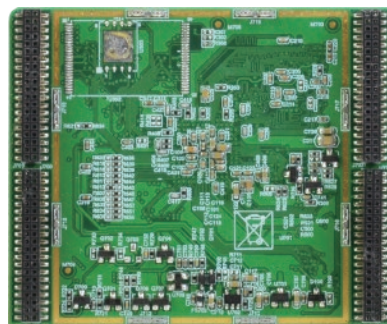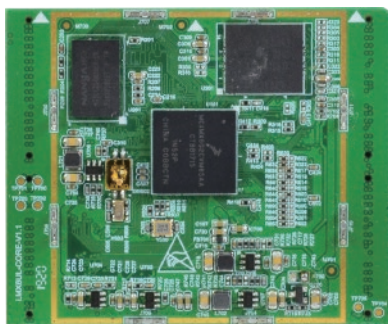
ABOUT POLYHEX

As a board level and system level designer and manufacturer, Polyhex, with 9 years' 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 venders like Intel, NXP, ST, Rockchip, Allwinners 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.

POLYHEX
Beyond the Embedded Deployment