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

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

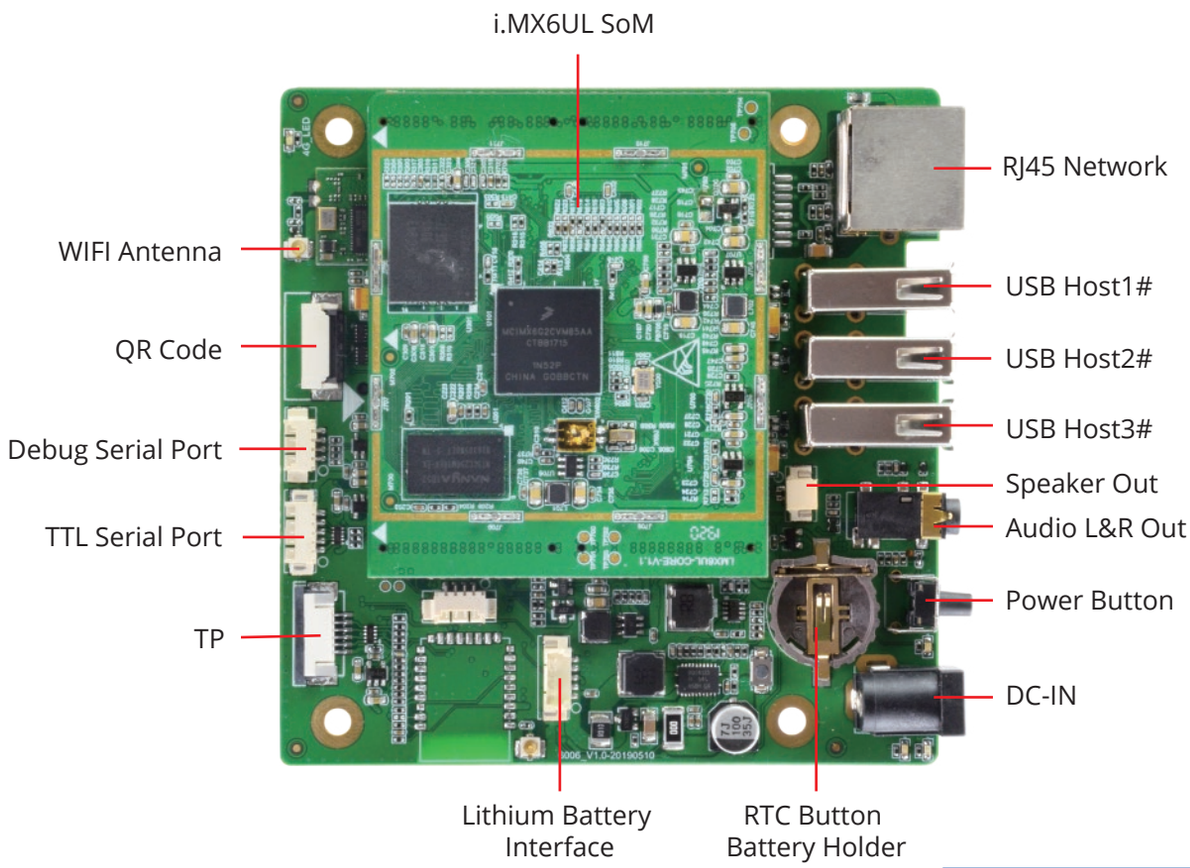
The SOM-NMX6UL is a highly flexible System-on-Module (SoM) based on NXP i.MX 6UltraLite Cortex-A7 processor with 528MHz CPU Clock. It is a power-optimized cost-effective SOM that perfectly fits various embedded and industrial products and segment. The SOM-NMX6UL provides a variety of interfaces and connectivity 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 one 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 i.MX6UL Cortex-A7

Buildroot/Yocto



SOM-NMX6UL

System on Module based on NXP i.MX 6UL CPU

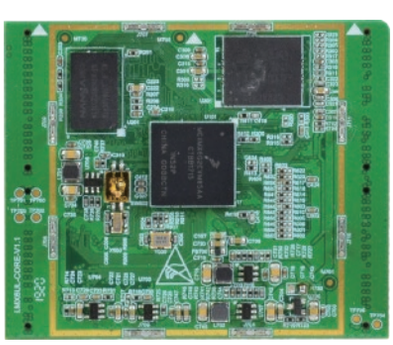
Model Number: DVK-NMX6UL

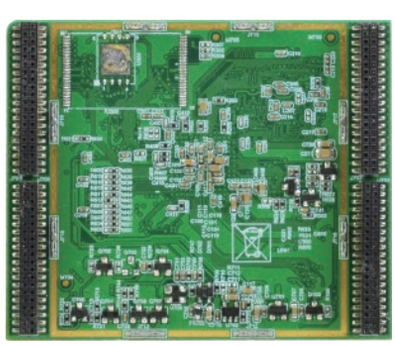
Main Features:

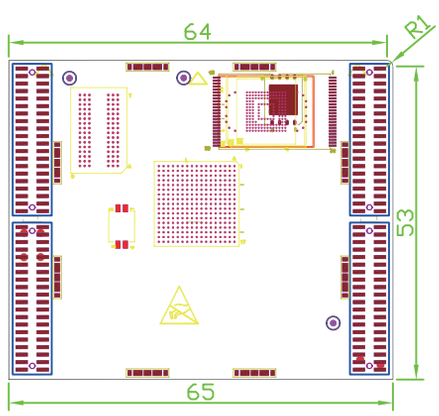
- NXP i.MX 6UltraLite ARM Cortex-A7 528Mhz CPU
- Onboard 256MB RAM (512MB/1GB optional)
- Onboard 4GB eMMC (8GB/16GB/32GB/64GB optional)
- Supports Buildroot 2019.02.4, Yocto 2.5.2 operating system
- Other Interfaces: One ethernet, Dual CAN, I2C, SPI, GPIO, Serial, ADC, PWM

Technical Specifications:

System	
CPU	NXP i.MX 6UL CPU MCIMX6G2CVM05AB (default)
RAM	Onboard 256MB DDR3 (512MB/1GB optional)
eMMC	Onboard 4GB (8GB/16GB/32GB/64GB optional)
Kernel	Linux 4.1.15
OS	Buildroot 2019.02.4, Yocto 2.5.2
Connectivity	
LAN	1 x Ethernet, supporting MII/RMII
GPIO	Up to 106 x GPIO
Serial	Up to 8 x serial ports
I2C	Up to 4 x I2C
CAN	Up to 2 x CAN
SPI	Up to 4 x SPI
ADC	Up to 10 x ADC
PWM	Up to 8 x PWM
I2S	Up to 3 x I2S
Camera	1 x 8bit parallel camera port
JTAG	1 x JTAG debug port
LCD	1 x 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
Mechanical	
Dimension	65mm(L) x 54mm(W) x 9mm(H)







POLYHEX
Beyond the Embedded Deployment

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.