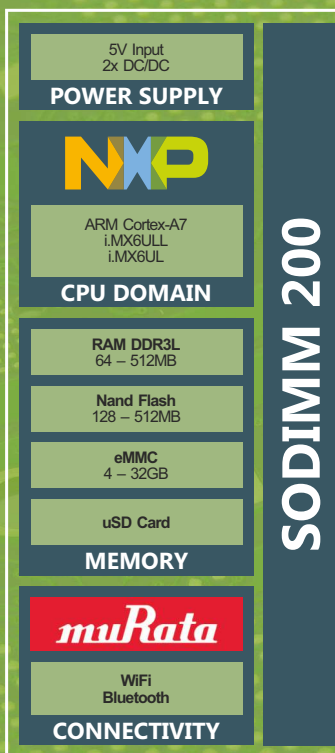




- ✓ Powered by NXP i.MX6UL/ULL processor
- ✓ Built-in Murata WiFi/Bluetooth
- ✓ Popular SODIMM200 Footprint
- ✓ Industrial Temperature Range

ARM Cortex-A7 based Industrial SOM

VisionSOM-6ULL/UL



MAIN FEATURES

NXP i.MX6UL, i.MX6ULL

- ARM Cortex-A7
- Clock up to 900 MHz
- 128 KB L2 cache

MURATA LBEE5KL1D

- WiFi IEEE 802.11b/g/n
- Bluetooth Version 4.1 + EDR

MEMORY

- DDR3L 64-512MB
- Various flash configuration (NAND, eMMC, uSD Card)

SOM FOOTPRINT

- SODIMM 200

LCD DISPLAY SUPPORT

- 24 bits parallel RGB LCD display up to WXGA (1366x768)
- Resistive touch screen controller (4wire/5wire)

OS SUPPORT

- Linux BSP (Yocto, Debian, Buildroot)

INTERFACES

- 10/100Mbps Ethernet x2 with IEEE1588
- USB OTG x2
- FlexCan (up to 2)
- UART (up to 8)
- I2C (up to 4)
- SPI (up to 4)
- ESAI x1

ANALOG

- 12 bits/10 channels ADC x2

CAMERA INPUT

- up to 24-bit parallel CSI

IMAGE PROCESSING

- PXB v2.0
- CSC, Resize, Combine, Rotate

OTHERS

- Industrial temperature range
- On board U.FL antenna connector
- Optimized power consumption

VisionSOM is comprised of a small processor module with CPU bus accessibility and standard I/O functionality and is an ideal solution for embedded projects.

VisionSOM module can often trim 8-12 months from design cycle and can be easily adapted to existing projects or can be used together with a dedicated carrier board. Customers who are looking for a complete solution can

use a set comprised of System on Module (SoM) and Carrier Board (CB).

VisionSOM module requires a matching customer's board or a carrier board to establish a complete system. Carrier Board together with VisionSOM module is ready to use computer on board and is giving enormous flexibility in building projects.

SOM

System on Module

VisionSOM-6UL

VisionSOM-6ULL

Hardware and Software Compatible

MPU architecture	ARM Cortex-A7	ARM Cortex-A7
Maximum clock	696 MHz	900 MHz
Number of Cores	x1	x1
RAM	64MB – 512MB	64MB – 512MB
eMMC	4GB – 32GB	4GB – 32GB
NAND	128MB – 512MB	128MB – 512MB
uSD Card Slot	YES optionally	YES optionally
WiFi & Bluetooth	YES	YES
Antenna connector	U.FL	U.FL
Temperature	-40 to +85°C (WiFi -30 to +70°C)	-40 to +85°C (WiFi -30 to +70°C)
Supported OS	Linux	Linux
Suitable Carrier Board	VisionCB-STD, VisionCB-DIN	VisionCB-STD, VisionCB-DIN

Altium Designer's library file is available for all SOM variants (SCH and PCB)

CB

Carrier Board

VisionCB-STD

VisionCB-DIN

Power Supply	9-12VDC or 5VDC
Ethernet 10/100Mbps	x1
USB OTG	x2
Display Interface	RGB
Arduino Socket	YES
RTC Battery backup	NO
RS485	NO
Reset button	YES
Compatible housing	NO
CAN Transceiver	NO
Raspberry Pi connector	YES
USB Linux console	YES

IN
DEVELOPMENT

DK

Development Kit

VisionSTK-uSD

VisionEVK-uSD

Included SOM	VisionSOM-6ULL (SLS16Y2_792C_512R_SD_1WB_SI_A)	VisionSOM-6ULL (SLS16Y2_792C_512R_SD_1WB_SI_A)
Carrier Board	VisionCB-STD	VisionCB-STD
7inch LCD display	NO	YES
USB Debug Cable	NO	YES
Ethernet Cable	NO	YES
12V Power Supply	NO	YES
WiFi-Bluetooth Antenna	NO	YES
Boot SD Card	NO	YES