

Space-saving, cost-efficient, power-saving.

- ▶ Solderable computer module in smallest design with only 29 x 29 x 3.2 mm
- ▶ Solder-on module enables cost-effective, automated assembly
- ▶ WiFi, Bluetooth and Dual Ethernet on board
- ▶ Supply voltage: 5.0 VDC at typ. 0.5 W
- ▶ Guaranteed long-term availability of 10+ years

Technical Data

Board type	Solderable SOM
5-Cent Cooling available	✘
CPU details	1x ARM Cortex-A7 up to 900 MHz
CPU vendor	NXP
CPU type	Cortex-A7
Co-processor available	✘
Number of cores	1

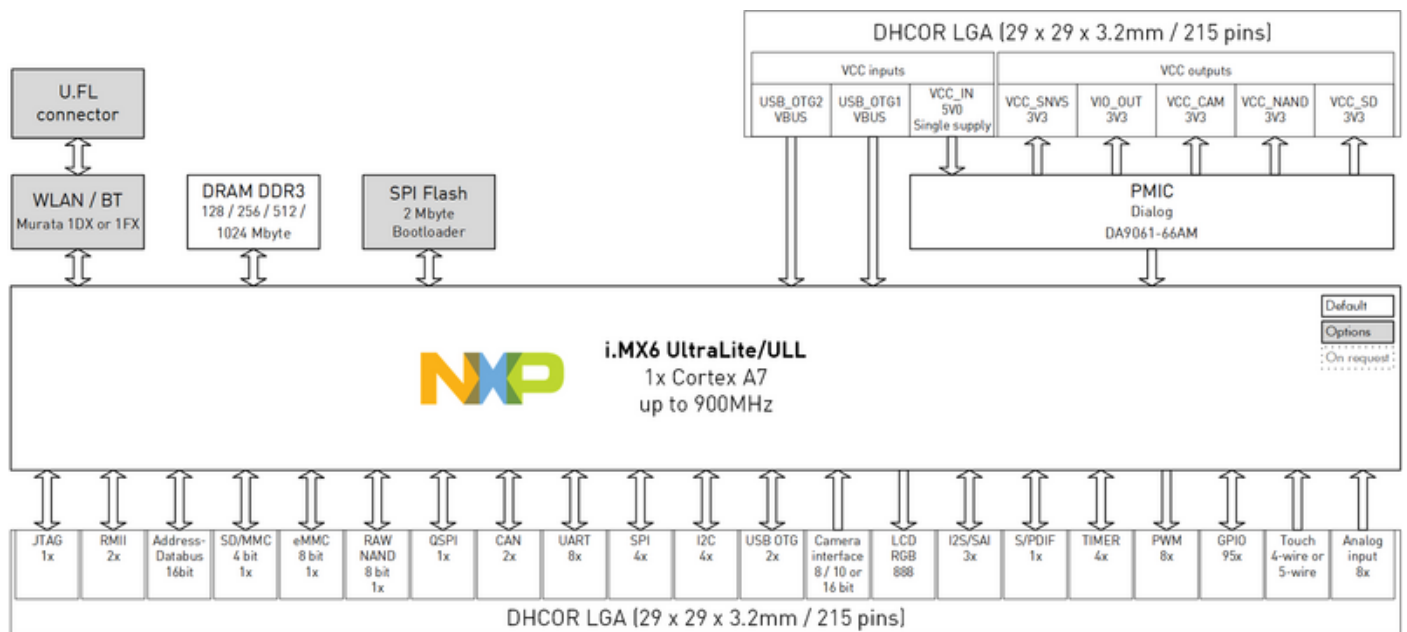
GPU available	✘
GPU type	3D GPU Vivante® @533 MHz - OpenGL® ES 2.0
Security	Crypto Engine, Secure Boot
DDR3 DRAM	128 / 256 / 512 / 1024 MB
SPI NOR flash	2 MB
Bluetooth available	✓
Bluetooth version	Bluetooth® v5.1 (BR/EDR/BLE), U.FL antenna connector onboard
WiFi available	✓
WiFi version	WiFi IEEE802.11b/g/n
BSP	Linux (Debian, Yocto)
Power supply	5.0 VDC
Typ. power consumption	0.5 W
Operating temperature	-40 to +85 °C
Storage temperature	-40 to +85 °C
Dimensions	29.0 x 29.0 x 3.2 mm

Available interfaces for LGA (271 pins)

Bus interface	16 Bit
Dual Ethernet available	✓
Ethernet 1	10 / 100 Mbit/s
Ethernet 2	10 / 100 Mbit/s
MMC/SD	MMC 4.5 / SD 3.0 / SDIO Port (1 / 2 / 4 Bit)

NAND	8 Bit interface Raw MLC / SLC
Quad SPI	1x
CAN	2x V2.0B / 1Mbit/s
UART	8x up to 5.0 Mbit/s
SPI	4x max. 52 Mbit/s
I2C	4x max. 400 kbit
USB OTG	2x USB 2.0 OTG with PHY
CSI (parallel camera)	1x 8 / 10 / 16 Bit
Display RGB	24 Bit
SPDIF	1x
I2S / SAI	3x
Number of GPIOs	95
PWM / Timer	4x 32 bit timer, 8x 16 Bit PWM
Debug interface	JTAG interface

Block Diagrams



Configurations

Item Number	Model (other configurations on request)	Product description
HI00094	DHCR-iMX6ULL-C080-R051-SPI-WBT-I-01LG	DHCOR i.MX6ULL, 800 MHz, 512 MByte DRAM, 2 MByte SPI boot flash, WiFi BT module, -40 to +85 °C, DHCOM revision, LGA connection
HI00095	DHCR-iMX6ULL-C080-R051-SPI-I-01LG	DHCOR i.MX6ULL, 800 MHz, 512 MByte DRAM, 2 MByte SPI boot flash, -40 to +85 °C, DHCOM revision, LGA connection

* Other configurations on request

What is the model number for ordering?

DHCR-CPU-Cxxx-Rxxx[-SPI][-W/WBT]-X-01LG

CPU	i.MX6ULL (MCIMX6Y2); i.MX6ULL, i.MX6UltraLite (MCIMX6G2); i.MX6UL
Cxxx	528 MHz: C052, 696 MHz: C069, 800 MHz: C080, 900 MHz: C090
Rxxx	128 Mbyte: R012, 256 Mbyte: R025, 512 Mbyte: R051, 1024 Mbyte: R102
X	Commercial temperature range (0 - 70 °C): C, Industrial temperature range (-40 - 85 °C): I (only -30 - 70 °C with option WBT)
01LG	DHCOR Revision, LGA connection
Options	
[-SPI]	2 Mbyte SPI boot flash
[-W] or [-WBT]	WiFi via Murata 1FX module with U.FL connector: W, WiFi and Bluetooth® via Murata 1DX module with U.FL connector: WBT