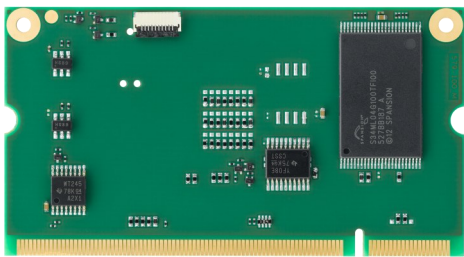


DHCOM i.MX6UL(L)

Pluggable, compatible SOM



Cortex
Intelligent Processors by ARM

- [1] DHCOM SPI 2 is only available, if ethernet 2 is not mounted.
 [2] DHCOM MMC/SD is only available if microSD socket and WiFi is not mounted.
 Also on module microSD socket is only available if WiFi is not mounted.
 [3] Cts and Rts is only available if second CAN port is not connected.
 [4] DHCOM UART 2 is only available if Bluetooth® is not used. This means
 WiFi/BT module 1DX is not mounted or module 1FX (only WiFi) is mounted.
 [5] I2S lines are shared with JTAG.

TECHNICAL DETAILS

Processor	ARM Cortex®-A7 up to 900 MHz
Features	Absolute power efficient and cost optimized application processor
DDR3 DRAM	128 / 256 / 512 / 1024 Mbyte
SLC-NAND flash	128 / 256 / 512 / 1024 Mbyte
eMMC flash	4 / 8 / 16 Gbyte
SPI NOR flash	2 Mbyte boot flash
E²Prom	2x 256 byte
WiFi / Bluetooth [2] [4]	WiFi IEEE802.11b/g/n Bluetooth® v5.1 (BR/EDR/BLE) U.FL antenna connector
microSD socket [2]	Available on module
Real-time clock RTC	Available on module
Supply	3.3 or 5.0 VDC / typ. 0.6-1.2 W
Temperature range	-40 to +85 °C operating -30 to + 70 °C operating with WiFi and Bluetooth
Dimensions	67.6 x 36.7 x 6.5 mm
Debug interface [5]	JTAG interface on module
BSPs	Linux

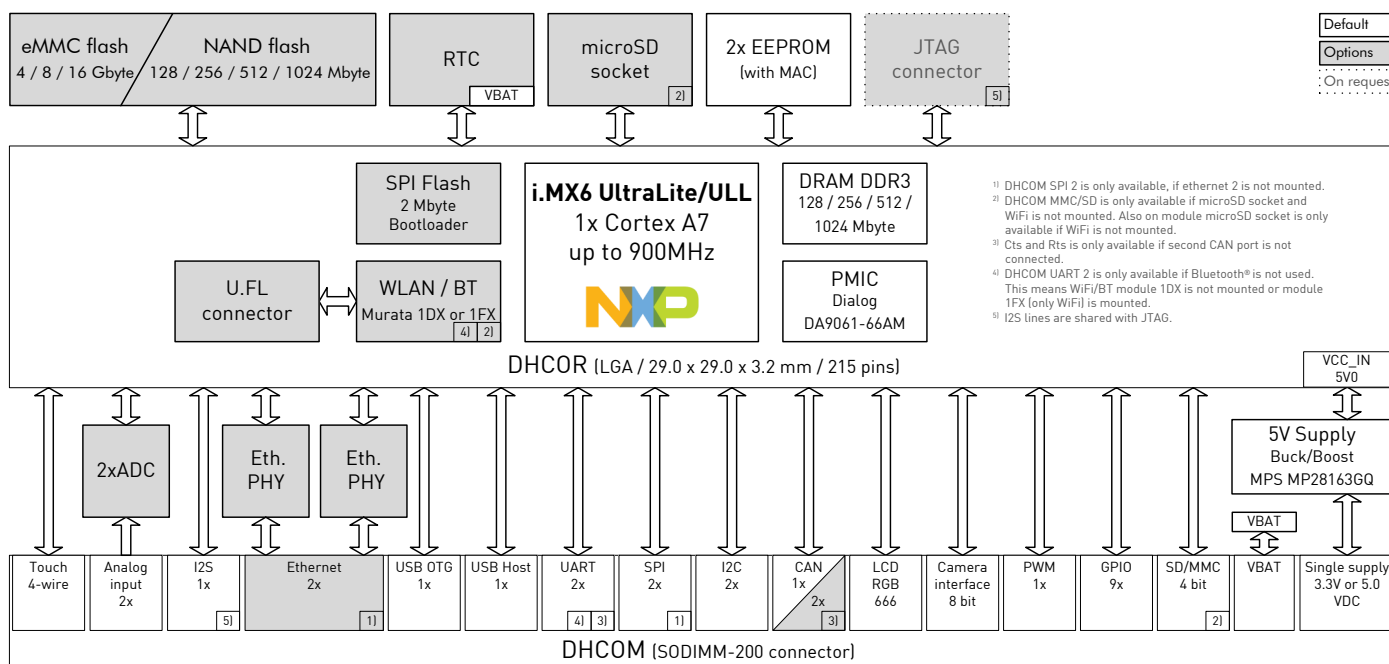
SODIMM-200 SOCKET

Bus interface	-
Ethernet 1	10 / 100 Mbit, IEEE 1588
Ethernet 2 [1]	10 / 100 Mbit, IEEE 1588
MMC / SD interface [2]	MMC 4.5 / SD 3.0 / SDIO Port (1-/2-/4-bit)
CAN 1	V2.0B / 1 Mbit/s
CAN 2 [3]	V2.0B / 1 Mbit/s
UART 1 [3]	Rx / Tx up to 5.0 Mbit/s
UART 2 [4]	Rx / Tx / Rts / Cts, up to 5.0 Mbit/s
UART 3	-
SPI 1	max. 52 Mbps
SPI 2 [1]	max. 52 Mbps
I2C 1	max. 400 kbit
I2C 2	max. 400 kbit
USB host 1	High-Speed
USB host 2	-
USB OTG	High-Speed
CSI (parallel camera)	8 bit / pixel data format
Display RGB	Max. 1366 x 768 pixels, 18 bit
Display LVDS 1	-
Touch	4-wire
I2S [5]	1
GPIOs	9 IOs
PWM	1x 16 bit
Analog inputs	2x 10 bit ADC with 3.3 V reference voltage

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BLOCK DIAGRAM



ORDERING INFORMATION

Ordering Configurations: **DHCM-CPU-Cxxx-Rxxx[-Fxxxx][-SPI][-E/E2][-CAN2][-SD][-RTC][-W/WBT][-ADC]-X-01D2**

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 °C - 70 °C); C, Industrial temperature range (-40 °C - 85 °C); I (only -30 - 70 °C with option WBT) Note: Industrial temp. range for eMMC version is -25 °C - 85 °C. Please contact us for -40 °C - 85 °C version.
01D2	DHCOM Revision, SODIMM200 socket

Options

[-Fxxxx]	128 Mbyte NAND: F0012, 256 Mbyte NAND: F0025, 512 Mbyte NAND: F0051, 1024 Mbyte NAND: F0102, 4096 Mbyte eMMC: F0409, 8192 Mbyte eMMC: F0819, 16384 Mbyte eMMC: F1638
[-SPI]	2 Mbyte SPI boot flash
[-E] or [-E2]	1x 100 Mbit Ethernet: E 2x 100 Mbit Ethernet: E2
[-CAN2]	Second CAN port available
[-SD]	microSD socket
[-RTC]	Low power temperature compensated real time clock (instead of CPU internal RTC)
[-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
[-ADC]	2x A/D converter inputs

Item number

Model (other configurations on request)

Product description

HI00062	DHCM-iMX6ULL-C090-R051-F0409-SPI-E2-CAN2-RTC-WBT-ADC-C-01D2	DHCOM i.MX6ULL 900 MHz, 512 Mbyte DRAM, 4 Gbyte eMMC flash, 2 Mbyte SPI boot flash, 2x ethernet, 2x CAN, RTC, Murata 1DX WiFi and Bluetooth® module, 2x A/D converter, commercial temperature range
HI00063	DHCM-iMX6ULL-C090-R051-F0409-SPI-E2-CAN2-SD-RTC-ADC-C-01D2	Like HI00062 but with microSD socket and without WiFi and Bluetooth®