

# DHCOM iMX6x

DH Computer On Module  
Form, Fit & Function compatible



## TECHNICAL DETAILS

Processor	ARM Cortex-A9 up to 1.2 GHz Solo/Dual/Quad
CPU features	2D / 3D graphics accelerator Imaging processing unit
DDR3 DRAM	256 / 512 / 1024 / 2048 Mbyte
SLC-NAND flash	0 / 128 / 256 / 512 Mbyte
eMMC flash	2 / 4 / 8 / 16 Gbyte
E <sup>2</sup> Prom	128 byte
microSD socket	Available on module
Real-time clock RTC	Available on module
Bus interface	16 bit address/data, 2 CS
Ethernet 1	10 / 100 Mbit, IEEE 1588
Ethernet 2	-
MMC/SD interface	4 bit mode
CAN	V2.0B / 1Mbit/s
UART 1	Full Function, up to 5.0 Mbit/s
UART 2	Rx / Tx / Rts / Cts, up to 5.0 Mbit/s
UART 3	Rx / Tx, up to 5.0 Mbit/s
SPI 1	max. 25 MHz
SPI 2	max. 25 MHz
I2C 1	max. 400 kbit
I2C 2	max. 400 kbit
USB host 1	High-Speed
USB host 2	-
USB OTG	High-Speed
Camera	-
Display RGB	Max. 2048 x 1536 pixels, 24 bit
Display LVDS	4-channel, max. 165 Mpixels/s
Touch	4-wire
Audio	Microphone, line-in, headphones
GPIOs	23 IOs
PWM	1, 16 bit
Analog inputs	1, 12 bit SAR converter
Supply	3.3 or 5.0 VDC / typ. 1.5-4.0 W
Temperature range	Operating: -40 to +85 °C
Dimensions	67.6 x 36.7 x 8.1 mm
Socket	SODIMM-200
Debug interface	JTAG interface on module
BSPs	Linux, Android, Windows Emb,



## DESCRIPTION & HIGHLIGHTS

The DHCOM iMX6 Computer On Module (COM) in SODIMM-200 format is based on the **Freescale iMX6** Cortex-A9 processor, delivering optimized performance for automation and multimedia.

Designed for industrial use, it offers a multitude of functions and interfaces, and conforms to the **DHCOM standard**, a novel, scalar module concept from DH electronics. The DHCOM standard enables the use of one and the same carrier board to accommodate the entire series of Form, Fit & Function compatible COMs.

Special attention was paid to the long-term availability, evidenced by the selection of the iMX6 processor from Freescale.

DH electronics module is also delivered complete with the Board Support Package (BSP) for Linux. Android and Windows CE (on request). Our qualified customer support is also available to further assist you.

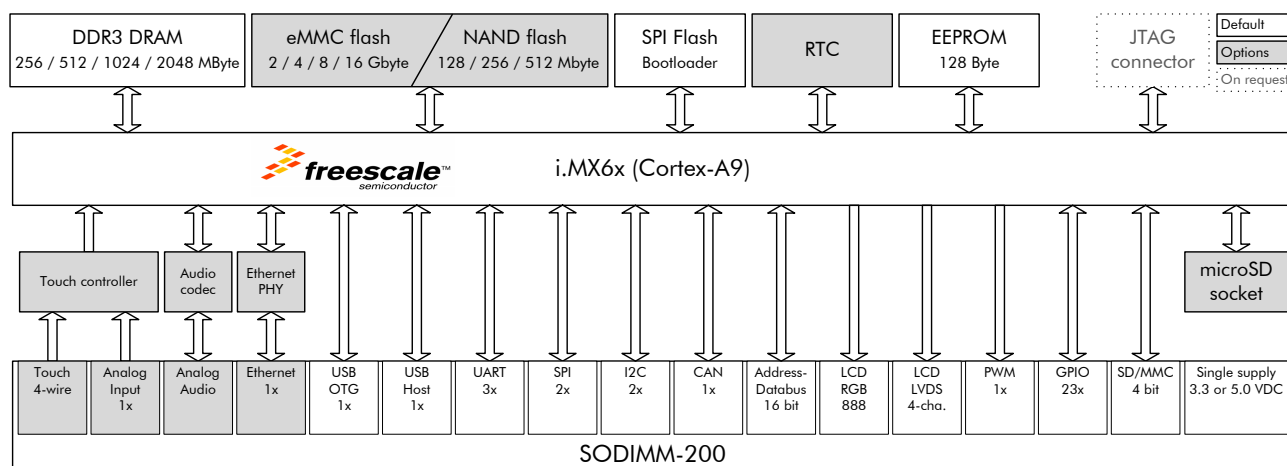
As your partner, we strive to help you in ensuring a fast, reliable and cost-effective product development.

# DHCOM iMX6x

Form, Fit & Function compatible COMs



## BLOCK DIAGRAM



## ORDERING INFORMATION

### Ordering Configurations:

DHCM-CPU-Cxxx-Rxxx[-Fxxx][-E][-SD]-[RTC][-T][-A]-X-01D2

CPU	Solo: iMX6S, DualLite: iMX6DL, Dual: iMX6D, Quad: iMX6Q
Cxxx	800MHz: C080, 1000MHz: C100, 1200MHz: C120
Rxxx	128MByte: R012, 256MByte: R025, 512MByte: R051, 1024MByte: R102, 2048MByte: R204
X	Commercial temperature range (0°C - 70°C): C, Industrial temperature range (-40°C - 85°C): I
01D2	DHCOM Revision, SODIMM200 socket
<b>Options:</b>	
[-Fxxx]	128MByte NAND: F0012, 256MByte NAND: F0025, 512MByte NAND: F0051, 2048MByte eMMC: F0204, 4096MByte eMMC: F0409, 8192MByte eMMC: F0819, 16384MByte eMMC: F1638
[-E]	Ethernet
[-SD]	microSD socket
[-RTC]	Low power temperature compensated real time clock (instead of CPU internal RTC)
[-T]	Resistive touch controller
[-A]	Audio codec

Item number	Model (other configurations on request)	Product description
	DHCM-iMX6DL-C0800-R051-F0051-E-SD-RTC-T-A-I-01D2	DHCOM iMX6 DualLite 800MHz, 512MB DRAM, 512MB flash, ethernet, microSD slot, RTC, res. touch, audio and industrial temp. range