

## Our alternative to the BeagleBone Black.

- ▶ Energy-saving Cortex-A8 processor from Texas Instruments with up to 1 GHz
- ▶ Equipped with Dual Ethernet and 3D graphics accelerator
- ▶ No heat sink necessary thanks to 5-Cent Cooling Solution
- ▶ Compatible with other modules from the DHCOM family thanks to SODIMM-200 socket
- ▶ Guaranteed long-term availability according to processor manufacturer's specifications

## Technical Data

Board type	Pluggable SOM
5-Cent Cooling available	✓
CPU details	1x Cortex-A8 up to 1 GHz
CPU vendor	TI
CPU type	Cortex-A8
Co-processor available	✗
Number of cores	tbd.

GPU available	✗
DDR3 DRAM	128 / 256 / 512 / 1024 MB
SLC-NAND flash	0 / 128 / 256 / 512 / 1024 MB
E2Prom	2 kbit
microSD available	✓
External RTC available	✓
Bluetooth available	✗
WiFi available	✗
BSP	Linux (Debian, Yocto)
Debug interface	JTAG interface on module
Power supply	3.3 or 5 VDC
Typ. power consumption	1.5 W
Operating temperature	-40 to +85 °C
Storage temperature	-40 to +85 °C
Dimensions	67.6 x 36.7 x 8.1 mm

## SODIMM-200 socket

Bus interface	-
Dual Ethernet available	✓
Ethernet 1	10 / 100 Mbit/s
Ethernet 2	10 / 100 Mbit/s
MMC/SD	4 Bit mode
CAN 1	1 Mbit/s

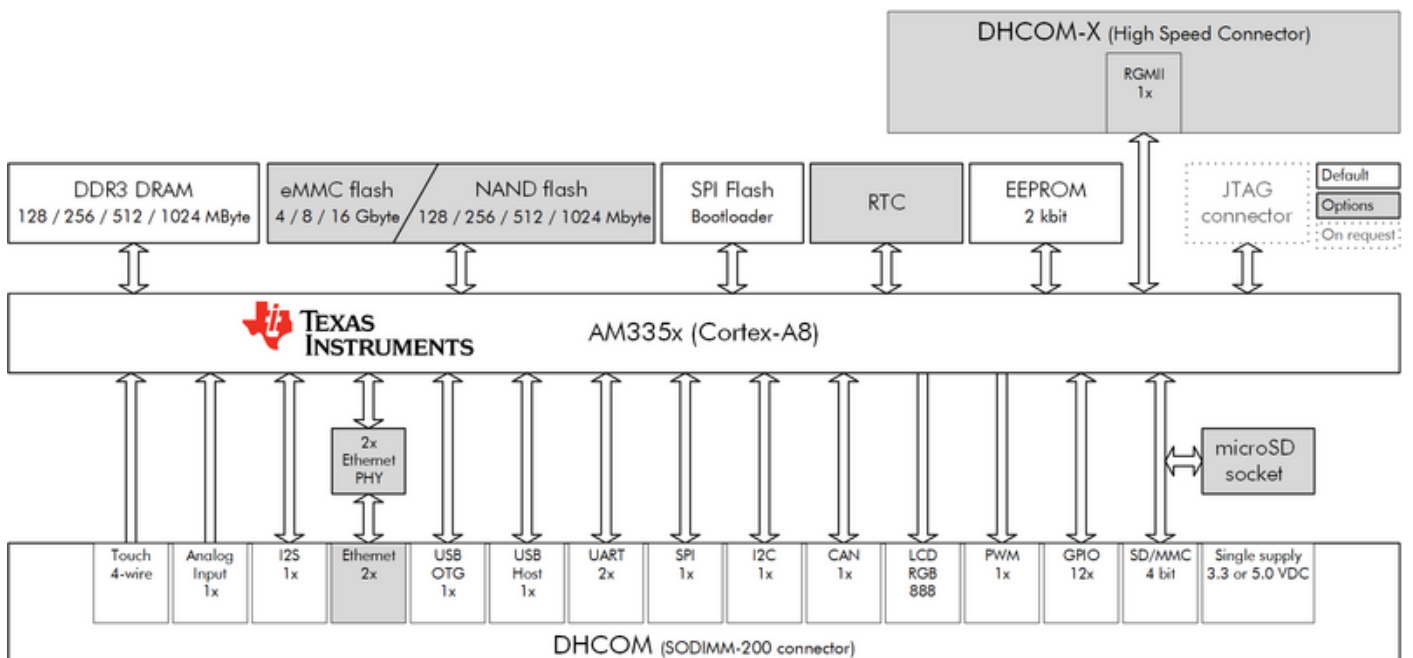
CAN 2	-
UART 1	Rx / Tx / Rts / Cts, up to 3.68 Mbit/s
UART 2	Rx / Tx, up to 3.68 Mbit/s
UART 3	-
SPI 1	48 MHz
SPI 2	-
I2C 1	400 kbit
I2C 2	-
USB host 1	High-speed
USB host 2	-
USB OTG	-
CSI (parallel camera)	-
Display RGB	24 Bit
Display LVDS 1	-
Touch	4-wire
I2S	1
Number of GPIOs	16
PWM output	1 PWM out, 16 Bit
Analog inputs	1 Analog in, 12 Bit, ADC converter

## High-speed socket

RGMII (Gbit Ethernet)	1
SATA	-

PCIe	-
MIPI CSI-2 (Camera)	-
Display LVDS 2	-
HDMI	-

## Block Diagrams



## Configurations

Item Number	Model (other configurations on request)	Product description
HA00016	DHCM-AM3352-C060-R051-F0409-E2-SD-RTC-I-01D2	DHCOM AM3352, 600 MHz, 512 MByte RAM, 4096 MByte eMMC, 2x 100 Mbit ethernet, micorSD socket, RTC, -40 to +85 °C, DHCOM revision, SODIMM200 socket

\* Other configurations on request

## What is the model number for ordering?

### DHCM-CPU-Cxxx-Rxxx[-Fxxxx][-E][-SD][-RTC][-HS]-X-01D2

CPU	AM3352, AM3354 (with graphics accelerator), AM3359 (with graphics accelerator, PRU (programmable real-time unit) and EtherCAT® slave support)
Cxxx	300 MHz: C030, 600 MHz: C060, 800 MHz: C080, 1000 MHz: C100
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 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
[-E] or [-E2]	1x 100 Mbit Ethernet: E, 2x 100 Mbit Ethernet: E2
[-SD]	microSD socket
[-RTC]	Low power temperature compensated real time clock (instead of CPU internal RTC)
[-HS]	High speed interface connector