

# TQMa335x

## Functional talent for universal applications

The TQMa335x Minimodule, based on the AM335x processor, offers a balanced ratio between computing and graphic performance. The basis for this is a ARM® Cortex™-A8 core with up to 1 GHz. The realised memory on the module provides best system support. The module is best suited for visualization and control applications with real time demands.

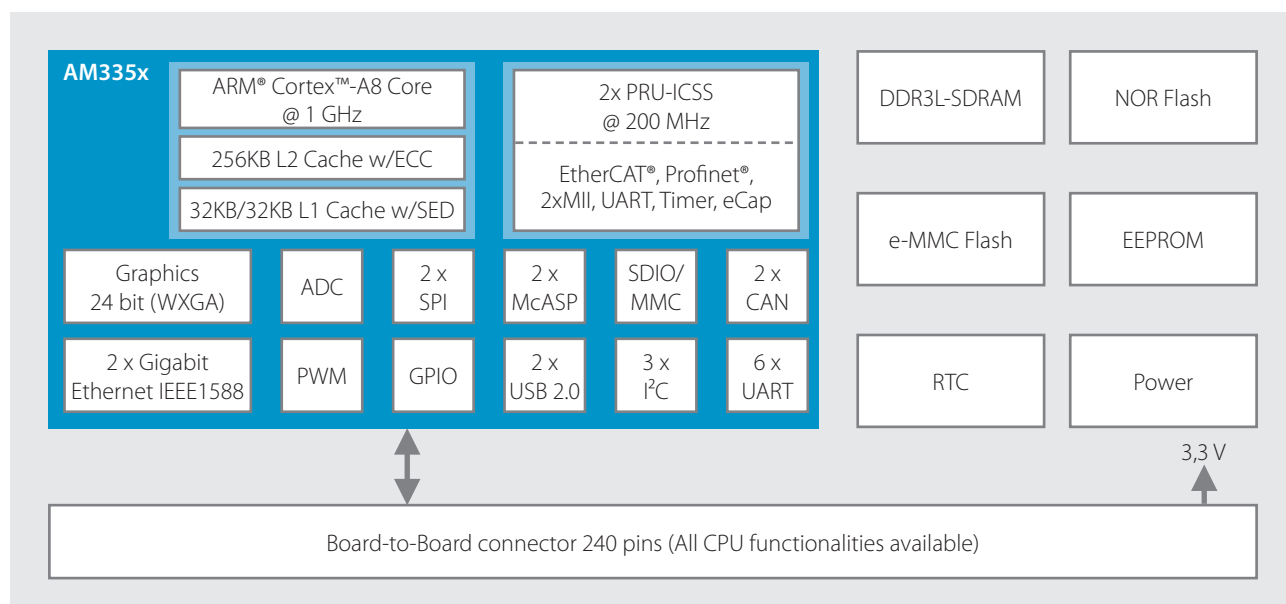
A large number of interfaces and module functions are implemented in the CPU due to the high level of interface and function integration. This allows the basic board to be developed easily and at low-cost.

All the processor's functional pins are on the module plug-in connector.

### The highlights:

- Real time communications subsystem
- Low-cost due to highest level of integration
- Extended temperature range
- 2x IEEE1588 Ethernet (int. Switch)
- Low power consumption (2 W)
- Long-term availability

## Block diagram TQMa335x



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## Technical specification

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### Microprocessor

AM3352, AM3354, AM3358, AM3359 (Up to 1 GHz)

### System interfaces

Up to 2x Ethernet 10/100/1000 Mbit (L2 Switch)

Up to 2x CAN 2.0B

Up to 6x UART

2x USB 2.0 high speed OTG interface

Up to 2x SDIO/MMC

Up to 3x I2C

Up to 2x McASP (4ch)

Up to 2x SPI

GPIO

Up to 8x 12 bit ADC channels

Up to 3x PWM

### Graphic interface

24 bit TFT Interface

### Memory

DDR3L-SDRAM: up to 512 MB

e-MMC flash: up to 16 GB

NOR flash: up to 128 MB

EEPROM: 0 / 64 kbit

### Other

Real Time Clock (RTC)

Temperature sensor

CPU JTAG Interface

### Power supply

3,3 V

### Ambient conditions

Standard temperature range: -25°C...+85°C

Extended temperature range: -40°C...+85°C

### Plug-in system

Board-to-Board plug-in system (240 Pins) 2\*120

### Operating systems

Linux, QNX, Windows Embedded Compact 2013

### Operating systems on request

VxWorks, Android

### Dimensions

54 mm x 38 mm

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## Ordering information

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### TQMa3352-AA

AM3352@ 800MHz, 256 MB DDR3L, 4 GB e-MMC Flash, 64 kbit EEPROM, -25°C...+85°C

For further product variants please visit our website:

[www.tq-group.com/en/TQMa335x](http://www.tq-group.com/en/TQMa335x)

### STKa335x-AA

STKa335x (Eval Kit) with TQMa3359-AA, AM3359 / 800 MHz, 256 MB DDR3, 4 GB e-MMC Flash, 64 kbit EEPROM, 1x RS232, 1x RS485, 2x CAN 2.0B isol., 1x USB 2.0 HOST, 1 x USB 2.0 OTG, 2x ETH 10/100/1000 (1x EtherCat), Stereo Out, Mono Mic In, RTC, Temperature sensor, Reset button, SD interface, Power Supply, 4 GB SD card, Cables

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## Starter kit STKa335x

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The core of the STKa335x is the TQMa3359 with an ARM® Cortex™-A8 CPU. The components contained in the starter kit constitute a modular system enabling you to develop your own product ideas. Development of graphic interfaces can be started immediately using the prepared combination of closed display unit and starter kit that are matched to each other.



TQ-Systems GmbH

Mühlstr. 2 | Gut Delling | 82229 Seefeld | Germany

Phone: +49 8153 9308-0 | Fax: +49 8153 4223

[info@tq-group.com](mailto:info@tq-group.com) | [www.tq-group.com](http://www.tq-group.com)

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