

# TQMa335xL

## Multifunctional talent for universal applications

The TQMa335xL Minimodule is the TQMa335x variant without connector and is directly soldered with the baseboard. The basis for this is a ARM® Cortex™-A8 core with up to 1 GHz.

The LGA module has been developed especially for the use in high volume projects.

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.

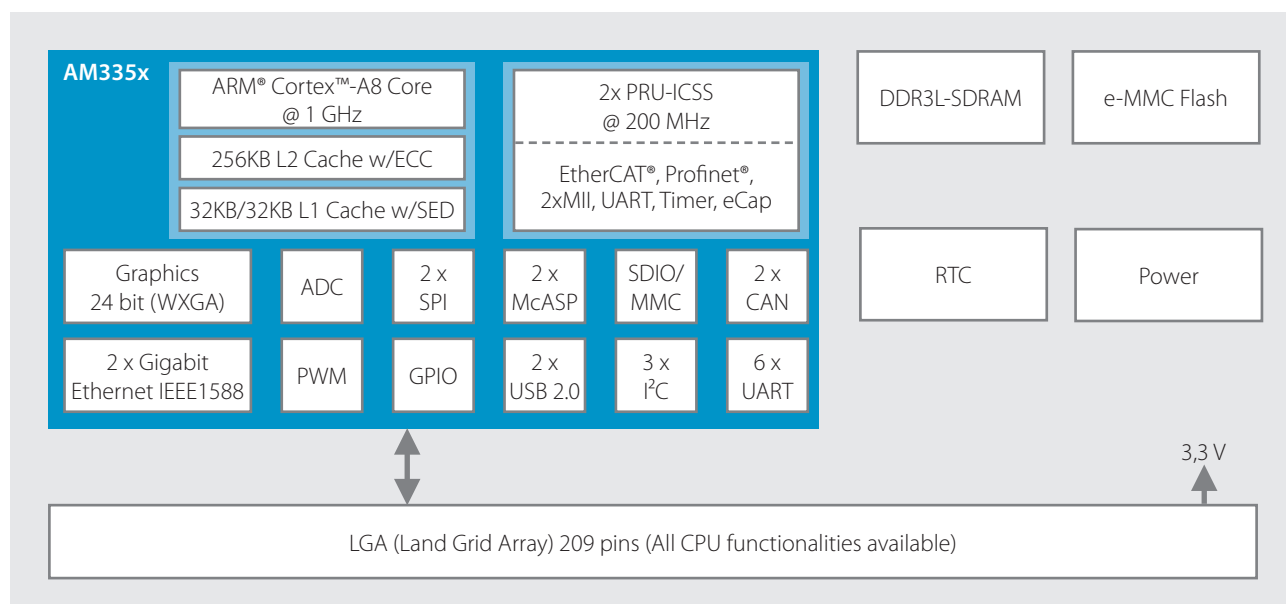
This allows the basic board to be developed easily and at low-cost.

All the processor's functional pins are on the LGA pins.

### The highlights:

- Real time communications subsystem
- Recommended for high quantity use
- 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 TQMa335xL



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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

### Other

Real Time Clock (RTC)

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

LGA (Land Grid Array) 209 pins

### Operating systems

Linux, QNX, Windows Embedded Compact 2013

### Operating systems on request

VxWorks, Android

### Dimensions

38 mm x 38 mm

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## Ordering information

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### TQMa3352L-AA (on request, min. 10,000 pieces)

AM3352@ 800MHz, 256 MB DDR3L, 4 GB e-MMC flash, -25°C...+85°C

For further product variants please visit our website:

[www.tq-group.com/en/TQMa335xL](http://www.tq-group.com/en/TQMa335xL)

### STKa335x-AA

STKa335 (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 gtr., 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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*\*Please note, that for evaluation purposes we provide you with the starter kit STKa335x with the module TQMa335x (not TQMa335xL!). The module mainly differs in the plug-system.*

Development of graphic interfaces can be started immediately using the prepared combination of closed 7" display unit and starter kit that are matched to each other.

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.



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