

Press Release:

Reference: RiTech/PR15-001

Date: Friday, 14 August 2015

TQMa335xL – The ARM Cortex™-A8 module for cost-intensive designs with high quality demands

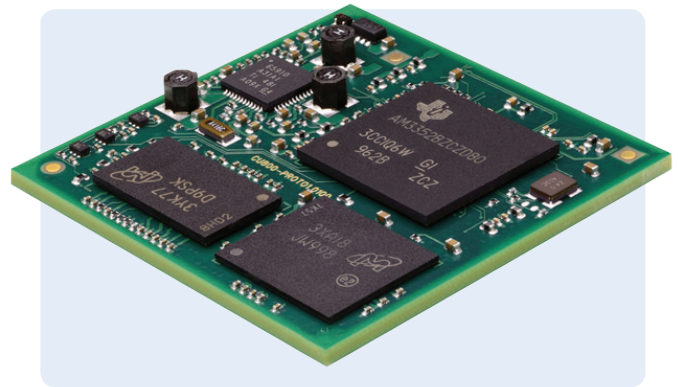
With the TQMa335L, TQ-Systems has developed a small Minimodule with high processing power which can be directly soldered to the base board. This module, which is based on the ARM processor family AM335x from Texas Instruments, is ideal for device developments where high quality is also required in addition to a low price.

This module is the second Minimodule of TQ which is based on the AM335x from Texas Instruments. "TI is excited that TQ has created a new embedded module for our Sitara AM335x family of processors," said Rogerio Almeida, marketing manager at Texas Instruments. "The new TQMa335xL module is optimized for high volumes in terms of technology and costs. The L version can be directly soldered onto the baseboard, making it more cost effective with a smaller footprint. Based on our new collaboration with TQ, other joint projects will follow to support future architectures."

The ARM Cortex™-A8 module is based on LGA (Land Grid Array) technology: Here the connections of the modules are placed on the base in the form of a chessboard style grid (grid array) of interfaces (land). This allows the module to be soldered to the motherboard cheaply, without requiring a plug-in connector, using a qualified welding process.

With compact dimensions (38x38mm²) and low installation heights (5mm) the TQMa335xL is an ideal core for applications where not much space is available. As usual with TQ, the user has access to all the signals and functions of the CPU.

With a total of 209 pins, the customer can also use two CAN 2.0 for communication in addition to 2x Gigabit



Ethernet, USB host/USB-OTG controller and up to 6 UARTs. Other functional units can be connected via SDIO, SPI, I2C and McASP. Up to eight 12 bit ADCs round off the possible areas of application.

On the TQMa335xL all the available CPU versions – from the AM3352 to the AM3359 – can be used. They differ in particular in the processing power and their functionality. This provides the user with a processor module which is optimized in price and performance to diverse applications. The processing power can be scaled from 300MHz to 1000MHz.

With the graphics controller in the AM335x and the optimum 3D graphics support, display applications can be achieved with a resolution of up to WXGA (1366x768). Thanks to these features demanding and innovative operating concepts can be implemented at a good price.

On the TQMa335xL, RAM with up to 512MByte DDR3L and up to 16GB eMMC Flash has been implemented for programs and data. Both TI modules from TQ, the TQMa335xL and the TQMa335x, are software-compatible. This allows the available, and tried and tested BSPs such as Linux, QNX and WIN EC2013, as well as the available software solutions such as IEC61850 (smart grid communication stack) to be used.

With this industrial-standard design, TQ has expanded its product range to include an extra ARM Cortex™-A8 module, which stands out in particular thanks to its good balance between price and performance. All customers and interested parties of TQ also receive support for this product with the usual reliability and quality in the implementation of their projects.

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About the TQ Group

As an electronics service provider (E²MS supplier and CEM) TQ offers the complete range of services from development, through production and service right up to product life cycle management. The services cover assemblies, equipment and systems including hardware, software and mechanics. Customers can obtain all services from TQ on a modular basis as individual services and also as a complete package according to their individual requirements. Standard products such as finished microcontroller modules (minimodules), drive and automation solutions complete the range of services.

Through the combination of electronics services and finished system components, TQ offers customer-

specific products as ODM products and thereby addresses customers who would like to receive finished products and at the same time benefit from the advantages of a customer-specific solution. ODM products are provided on time and economically using a comprehensive solution kit. The kit includes finished electronic, mechanical and software components including certification and licenses.

The TQ Group employs approx. 1,300 colleagues at their sites in Seefeld, Weßling, Murnau, Peißenberg, Peiting, Durach/Allgäu, Wetter/Ruhr, Chemnitz, Leipzig, Fontaines (Switzerland) and Shanghai (China).

Manufacturer:

TQ Group

www.tq-group.com/en

Rugged Interconnect Technologies

Rugged Interconnect Technologies focuses on offering rugged product solutions for industrial, mining, communications, defence and homeland security applications.

Working closely with our valued customers we can propose solutions based on application-ready computing platforms, customer specific requirements or a wide range of commercial off-the-shelf modules.

We represent best-of-breed suppliers with leading edge technologies consisting of rugged systems, processor, communication and multifunction I/O modules. Together we target applications such as sensor management and control, radar / sonar, digital signal processing, imaging, video tracking, situation awareness, recording and storage.

Rugged Interconnect Technologies prides itself in offering customers local sales and engineering support, product life cycle management and, when required assistance with next generation technology insertion. We have provided bus and board technologies to national and international customers for more than 30 years.

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