

Our technology enhances yours.



 quark 963



TWIN
| DEVELOPMENT

Why Quark 963 as a processor engine ?

Using Quark 963 will significantly reduce your product development risk, cost and time. The circuit has been fully tested and verified, so you can concentrate on your project.

The Quark 963 is ready at the beginning of your project allowing you to start sooner the software development.

Twin Development can assist your development team to port your application and further shorten your time to market.



→ Fast



Time to market

Accelerate your product development : all high density and fast logic is on the QUARK-963 module, significantly reducing the constraints on the base board PCB layout and concentrate on your products specifics.



→ Easy



Versatility

The embedded FPGA logic allows you to create complex functions directly from the QUARK-963. You could use this to add specific peripherals... Should you need 8 UARTS or to interface to an outdated GESPAC backplane bus... Put all this in the FPGA.



→ Robust



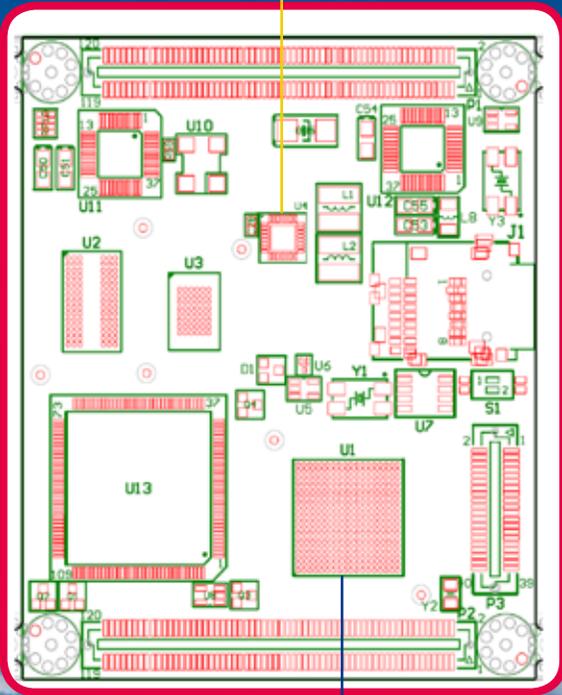
Reliability

You don't start your product from scratch but use a robust and well debugged CPU engine.
The board has been especially designed to take care of EMC compatibility and has already been tested in various hardware environments.



Quark 963

The CPU engine



Low Power



Extended temperature range

Supporting -40° C to + 80° C (on request).
Especially designed for industrial applications and harsh environment.



Fanless

No moving part.



Linux

Q 963 is available with a pre-installed U-boot, a Linux 2.6 and a debian filesystem. We provide you with a ready to start open source programming environment.

Microsoft Windows CE

On request.



Microsoft Windows CE

→ CPU

- 200 MHz /220 mips 32bits ARM9 core (ATMEL AT91SAM9263)
- 512 kB (up to 8MB) Flash memory
- 32 MB (up to 64 MB) Low power SDRAM (100MHz bus speed)
- Linux 2.6 OS with drivers

→ Interfaces

- Micro-SD push/push connector supports up to 4GB cards
- CAN 2.0B interface compliant
- Dual USB hosts and one USB client (USB 2.0 full-speed)
- Ethernet 10/100 PHY interface
- LCD panel digital interface (up to 2048*2048 resolution) with 2D graphic accelerator
- Image sensor interface
- 3 TTL Serial ports
- 48 kHz Stereo AC97 Audio codec
- JTAG ICE interface
- Backed-up RTC (with external battery supplied with baseboard)

→ Size

- 70 mm x 83 mm
- 0.8 mm pitch high density connectors
- Featuring from 5 to 16 mm stacking heights

→ Power

- 6 to 24 VDC supply (0.5W est.)
- Regulated 5v, 3V3 and 2V5 output
- Operating temp : 0°/70° c. (Industrial temp range on request)

INDUSTRIAL

CONSUMER



→ Telecom

→ Transport

→ Environment

→ Metering

→ Motorcycle

Voice synthesis

Our customer is using its powerful Text to Speech algorithm on the Quark 963 to send alarm messages through the phone or GSM. Especially for industrial environment.

- Security
- Remote monitoring
- Supervision

Protocol conversion

The Quark 963 and its specific baseboard is used in a 19" rack as a protocol converter for traffic monitoring.

Radioactivity monitoring

Our customer chose Twin Development to develop a water radioactivity measurement station. The FPGA is used to drive 10 full RS232 UARTs (at 115200 bauds) and 3 RS-485 to connect all equipments (measurement and communication).

Fault recording

The integrator chose Twin Development to develop various parts of its digital fault recording equipment mainly used in high voltage substations.

TripY

TripY is a digital Road Book GPS for motorcyclists. The Quark 963 is connected to a GPS and used in extreme conditions (vibration, temperature, humidity...). Its computing power is used for mapping applications.



Twin development is a electronic design house
with a strong experience in
high-end embedded system design.

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