

Hardware kits as components for system solutions

TQ presents hardware kits based on ColdFire, Power Architecture, ARM and x86. The hardware kits, consisting of a mainboard and module, allow cost-efficient and fast integration with complete devices and system solutions. Various displays are available for visualization.

The hardware kits can be directly integrated into numerous controls and applications and thereby provide the basis for a quickly realizable system solution. For the five hardware kits, the following CPUs are used: ColdFire MCF5329 (240MHz), Power Architecture MPC5200 (400MHz), ARM i.MX31 (532MHz) Intel Atom (1.1GHz / 1.6GHz) and VIA Eden (400 – 1200 MHz)

The hardware kits offer users a range of interfaces such as RS232, RS485, CAN, digital 24V I/Os, USB, Ethernet and graphics. In addition, a touch controller was incorporated for connecting a 4-wire resistive touchscreen. Four of the provided mainboards have the same mechanical dimensions and are therefore exchangeable.

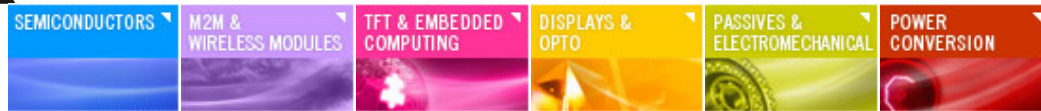
An exception is the solution with the VIA Eden based on the MBx86P mainboard. Conventional computer interfaces are available such as RS232, USB, Ethernet and sound. A PC104+ port can be used to realize additional interfaces. Furthermore, there is a PATA interface and CF card slot for mass storage connections.

All hardware kits offer numerous predefined display solutions with different diagonals and resolutions. In assembling them, a favorable price/performance ratio was sought in regard to brightness, contrast and viewing angle.

A major advantage is the ability to flexibly choose the right architecture and appropriate display solution depending on the requirements.

Typical uses for hardware kits with long-term availability are: Machine controls, building services, building automation, automotive engineering, rail engineering, medical technology or measuring systems

With these solution components, TQ allows you to integrate into existing applications or quickly implement your company's own product. If the realized features are insufficient and expansions are needed, the TQ Group will offer its expertise in implementing specific customer solutions.



Technische Daten BlueLine Hardwarekits

Hardwarekit	Blue One Kit	Blue Pro Kit	Blue Power Kit
Modulausstattung	TQM5329-AC	TQM5200-AK	TQMa31
Touchinterface	4 Draht resistive	4 Draht resistive	4 Draht resistive
Arbeitsspeicher	16-128 MB SDRAM	16-256 MB SDRAM	32-256 MB Mobile DDR
EEPROM	4kB	8kB	8kB
Onboard-Flash	16-64 MB NOR	32 MB NOR	16-128 MB NOR
Cache I/D	16k unified	16k /16k	16k /16k + 128k L2
FPU	-	Double Precision	Single Precision
MIPS	211@240 MHz	760@400 MHz	640@533 MHz
SD-Card	-	-	Ja, via SD-Interface
CompactFlash	-	Integriert	Integriert
Grafik	18 bit TFT Interface	18 bit TFT Interface	18 bit TFT Interface
Verlustleistung Wtyp	4-5	5-6	6-7
CAN	1x 2.0B galv. getrennt	2x 2.0B galv. getrennt	1x 2.0B galv. getrennt
GPIO	4x In / 8x Out	4x In / 8x Out	4x In / 8x Out
Seriell	1x RS232+2x RS232 oder 2x RS485	2x RS232 oder 1x RS232 + 1x RS485	2x RS232 oder 2x RS485
Ethernet	1x 10/100 Mbit	1x 10/100 Mbit	1x 10/100 Mbit
USB	1x 1.1 HOST+ 1x 1.1 OTG	2x 1.1 HOST	2x 2.0 HOST
Reset-Taste	Ja	Ja	Ja
Vcc	24 VDC (15-30 V)	24 VDC (18-32 V)	24 VDC (15-30 V)
Standard Temperaturbereich	0...+70°C	0-70°C	0-70°C
Erweiterter Temperaturbereich	-30...+70 °C	-30...+70 °C	-30...+70 °C
Temperatursensor	Ja	Ja	Ja
RTC	Ja	Ja	Ja
Betriebssystem	µC Linux 2.6.22	Linux 2.6.29	Win CE 5.0 / Linux 2.6.29
Visualisierung	Nano-X	Qt (auf Anfrage)	Qt (auf Anfrage)
Audio	-	-	Stereo Out 2,2 W Mono Mic In

Bestellinformationen

BLUEONE-KIT-AA RK REV.105	Blue Power Kit (Modul + Mainboard) mit i.MX31 / 532MHz 16MB Flash, 128MB DDR, 64kB EEPROM
BLUEPRO-KIT-AA RK REV.105	Blue Pro Kit (Modul + Mainboard) mit MPC5200B / 400MHz 32MB Flash, 128MB SDRAM, 512kB SRAM, 8kB EEPROM
BLUEPOWER-KIT-AA RK REV.105	Blue One Kit (Modul + Mainboard), mit MCF5329 / 240MHz 16MB Flash, 32MB SDRAM, 4kB EEPROM

Zubehör

Blue-Display-KIT-AA-070 REV.100	7" Display Kit passend für Blue One, Blue Pro, Blue Power, Auflösung 800x480, 600 cd, LED Backlight, Kabelsatz
Blue-Display-KIT-AA-104 REV.100	10,4" Display Kit passend für Blue One, Blue Pro, Blue Power, Auflösung 640x480 Pixel, 450 cd, LED Backlight, Kabelsatz
Blue-Display-KIT-AA-120 REV.100	12" Display Kit passend für Blue Pro Auflösung 800x600 Pixel, 450 cd, LED Backlight, Kabelsatz
IPC-NT-18 REV.100	Tischnetzteil 18V/3,9A
MSTB2,5/2-ST-5,08 PHX	PHOENIX Spannungsversorgungs-Stecker