



Product Information

CompactPCI[®] Ultra ATA100 IDE Controller • CE1-MELODY

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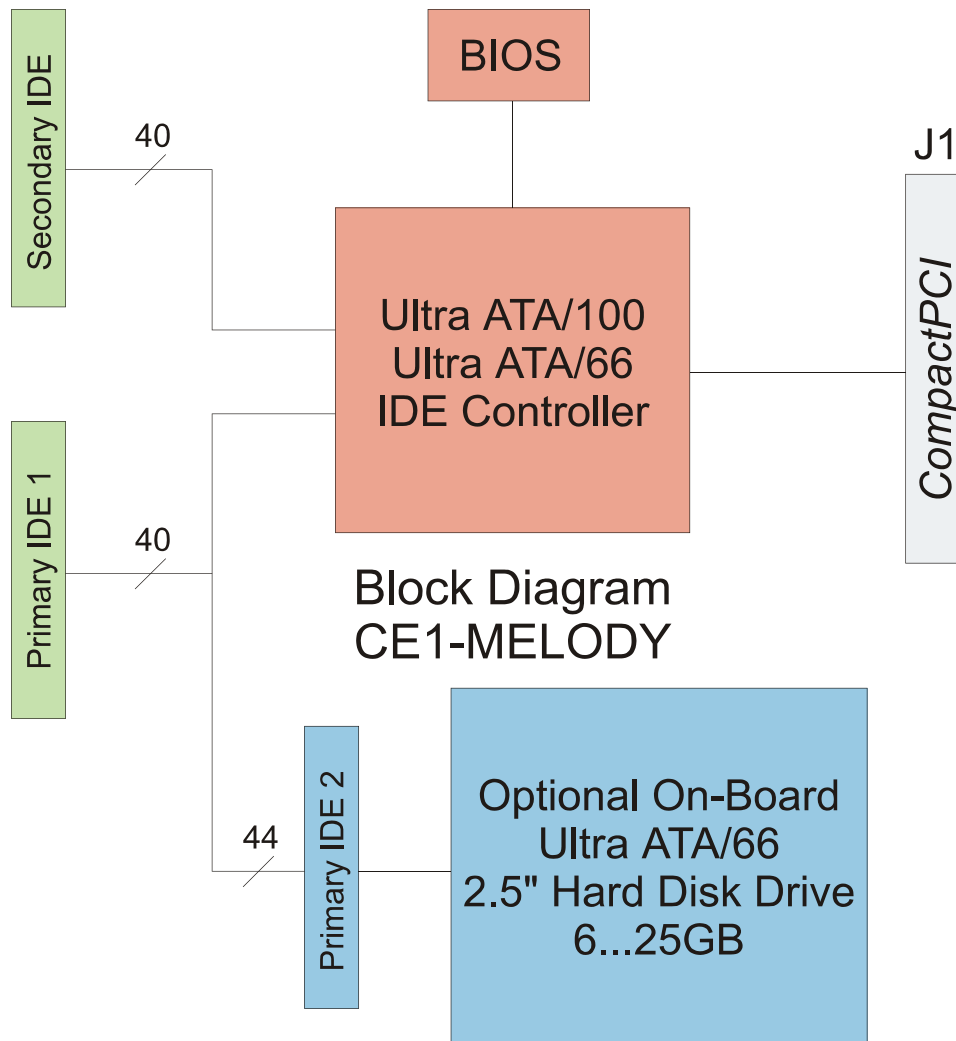
*With the emerging Ultra ATA/66 and Ultra ATA/100 protocol, the IDE interface has evolved to be an attractive solution to industrial applications. Therefore EKF introduces the **CE1-MELODY**, a dual-port Ultra ATA/100 and Ultra ATA/66 IDE hostadapter for *CompactPCI*[®] systems.*

The single-size Eurocard (3U) optionally can be equipped with an additional 2.5-inch harddisk drive, providing a capacity of up to 80GB. This combination represents a complete mass storage solution, convincing by its extremely compact outside, and suitable for industrial grade operation.

The CE1-MELODY is provided with an extended BIOS and supports booting from an attached drive. If there are IDE ports already present, the CE1-MELODY expands the overall number of IDE devices that can be installed in a system. While the new 80-conductor Ultra ATA cables are detected automatically, the CE1-MELODY is fully backward compatible to previous ATA/IDE protocol standards.

With its low price, the CE1-MELODY Ultra ATA/100 & Ultra ATA/66 hostadapter is a serious and advantageous alternative to low end SCSI based controllers.





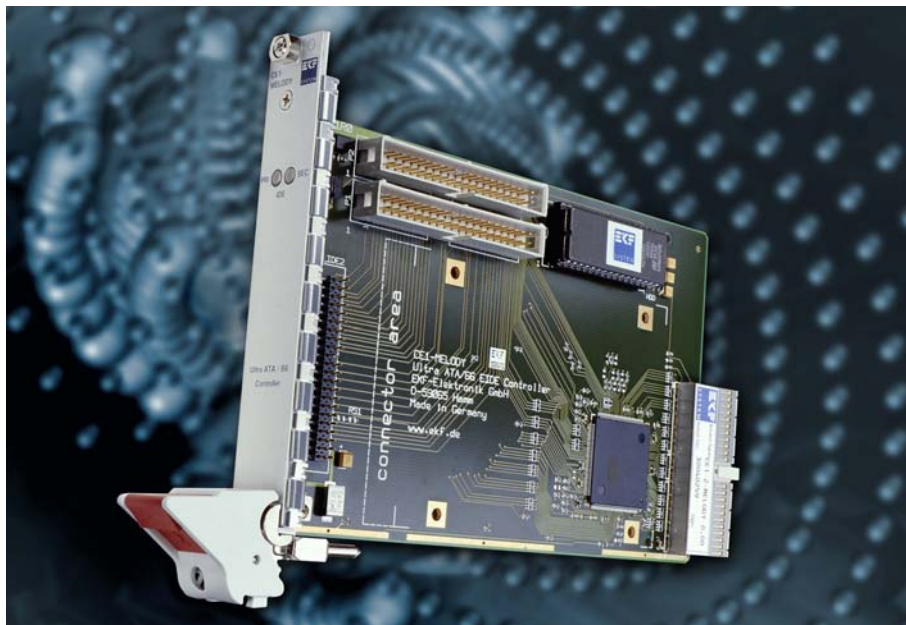
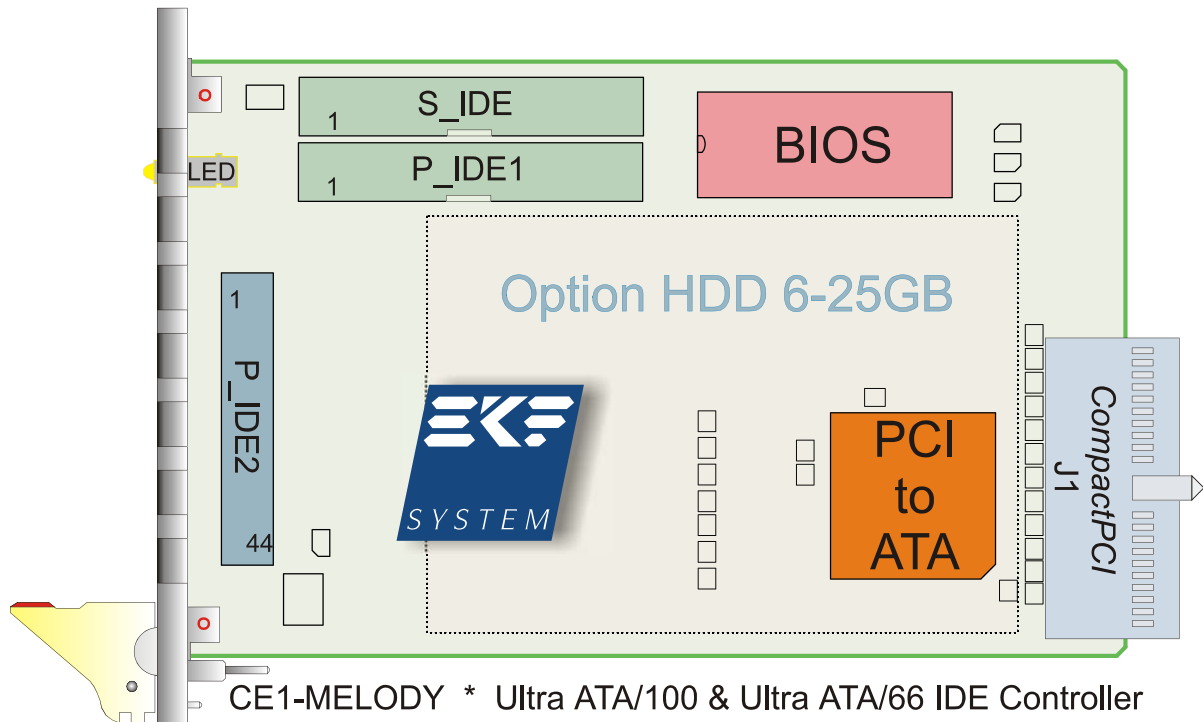
The CE1-MELODY controls up to four IDE devices (two each port). To achieve the maximum 44.4/66.6/100MBps data transfer rates (UDMA modes 3-5), an 80-conductor Ultra ATA cable with additional GND leads must be used. Legacy IDE devices up to 33MBps can be attached via 40-conductor IDE cables. The cable type in use is detected by a sensing circuitry, adjusting the CE1-MELODY automatically to the respective maximum data transfer rate.

The optional on-board harddisk drive withstands mechanical shock and vibration, making the CE1-MELODY a highly reliable, ruggedized storage solution, suitable also for portable systems.

Available for download via the EKF HomePage, drivers for DOS, Windows 95/98, NT4 and Windows 2000 are provided. The CE1-Melody is also fully operational and compatible with default IDE drivers from Microsoft.

For 6U *CompactPCI*[®] systems there is a mechanical kit available, expanding the CE1-MELODY front panel to 6U full height (CR9-ADAPT).





Technical Specifications		
Board	Dimensions	3U Eurocard (100x160mm ²), front panel width 20.2mm (4HP), mechanics constructed with respect to EMC requirements, ejector lever
IDE	General	2 IDE ports for up to 4 external IDE devices, 1 IDE port for optional on-board harddisk, all legacy and recent transfer modes up to Ultra ATA/66 and Ultra ATA/100 (CE1-5-MELODY only)
	Connector P_IDE1 S_IDE	2 x 40-pin shrouded header 2.54mm pitch, suitable for microribbon flat cable wiring to external IDE devices, with 44MBps, 66MBps and 100MBps transfer rates an Ultra ATA 80-conductor cable is required (detected automatically)
	Connector P_IDE2	1 x 44-pin header 2.00mm pitch, suitable for flat cable wiring to the optional on-board harddisk (using of both connectors P_IDE1 and P_IDE2 simultaneously is not recommended), +5V supply by self resetting fuse 1.25A
	Data Transfer Rates	PIO modes 0-4 (max. 16.6MBps) MDMA modes 0-2 (max. 16.6MBps) UDMA modes 0-4 (max. 66.6MBps with 80-conductor cable) CE1-5-MELODY only: UDMA mode 5 (max. 100MBps with 80-conductor cable)
<i>CompactPCI</i> [®] Bus	Connector J1	32-Bit, 33MHz, DMA bus master (133MBps) 3.3V or 5V interface
LED Display	Front Panel	1x2 LED, primary and secondary IDE port activity
Drivers	Download	Windows 98, NT4, Windows 2000, DOS
Power Requirements	Connector J1	+5V \pm 5% 0.1A max. (optional on-board harddisk not included) +3.3V \pm 0.3V 0.2A max.
Temperature Humidity	Operating	operating temperature 0-70°C (0-55°C option on-board HDD), humidity 8-90% non condensing
Option On-Board HDD	Connector P_IDE2	2.5" HDD, e.g. Hitachi Travelstar, typical power consumption 5W (startup), 2.3W (operation), mechanical shock (operation) 175G, 0-55°C ambient temperature

subject to technical change

Ordering Information		
Short Alias	Ordering Number	Description
MELODY	CE1-5-MELODY	3U <i>CompactPCI</i> Ultra ATA/100 IDE controller
	CR9-1-ADAPT	mechanical kit, expands front panel to 6U



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