Data Sheet

DIMMBoard DX86

DIMM-PC® Computer-on-Module

Highlights

– 32-Bit x86 DMP Vortex86DX processor
– 256 MB DDR2 Memory onboard
– -40°C to +70°C operating temperature
– Support for legacy interfaces like ISA or LPT

■ Credit card sized Computer-on-Module
■ Headless operation without graphics controller
■ Long term availability
■ Extended temperature variant with conformal coating
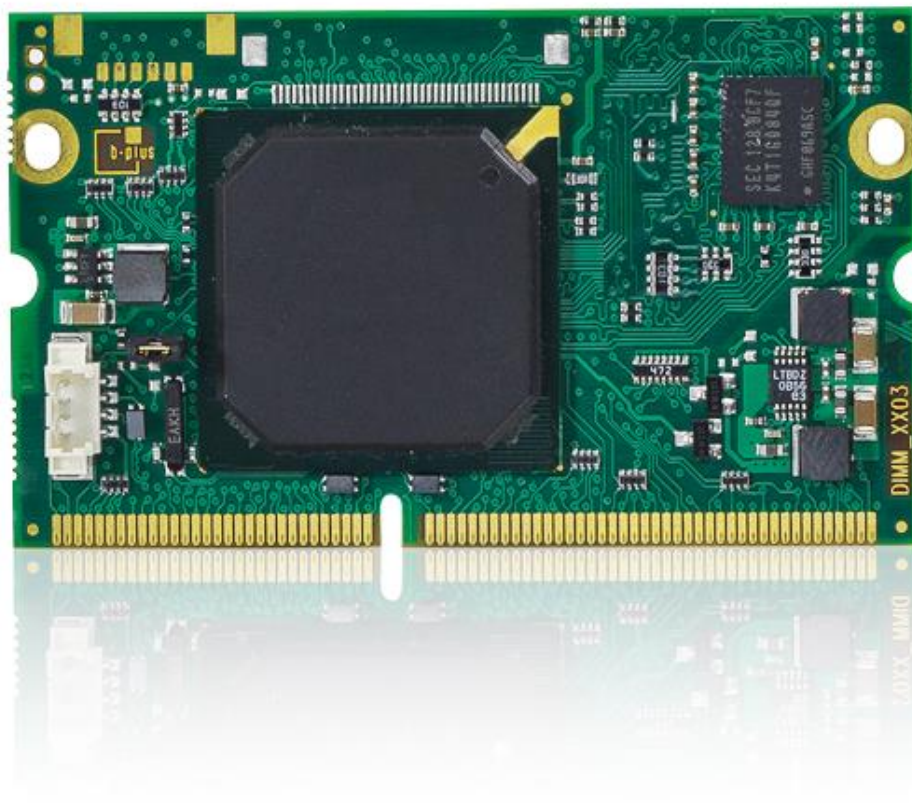
SODIMM 144 COM Solution

DIMMBoard DX86 is nearly compliant to the DIMM-PC® module specification in fit & functions. The core unit is a x86 compliant Vortex86DX SoC by DMP clocked at 600 MHz for passive cooled operation.

Due to the extremely low power consumption of 4 W it's the ideal solution for mobile embedded devices. The SoC supports embedded operating systems like DOS, WinCE, WinXP embedded and Linux on µSD.

Specifications

Variant	**DIMMboard DX86**	**DIMMBoard DX86 EXT**
Part Number	B13500-DIM-001-0001	B13500-DIM-001-0002
Operating Temperature	0℃ ~ +60℃	-40℃ ~ +70℃
Conformal Coating	No	Yes
CPU	DMP Vortex86DX SoC, 32-Bit x86 compliant, 16 KB L1, 256 KB L2 Cache	
CPU clock	600 MHz without heatsink, up to 1000 MHz with cooler	
RAM	256 MB DDR2 onboard	
Boot device	SD card, USB or Ethernet	
Flash	Onboard micro-SD card socket	
GPIO	10 programmable 3.3 / 5 V GPIO	
PS/2	1x Keyboard	
LPT	Rev 1.0 compliant (DMA, Serial IRQ support)	
ISA	16-bit ISA bus @ 8.33 MHz, 5 V tolerant	
Serial	2x TTL, 16C550 compliant, full featured with 16 byte FIFO, 50 to 460.8 kBaud	
Ethernet	1x Fast Ethernet IEEE802.3U 100Base-T	
USB	4x USB 1.1 / 2.0 (1x via onboard connector)	
Watchdog	30.5 µs to 512 s	
OS Support	DOS, WinCE, WinXP emb. Linux, QNX	
Dimensions	86 x 40 x 8 mm	
Power Supply	5 V DC +/-5%	
Power Consumption	3-4 W @ 600 MHz	
Console Redirection	Yes, COM1	