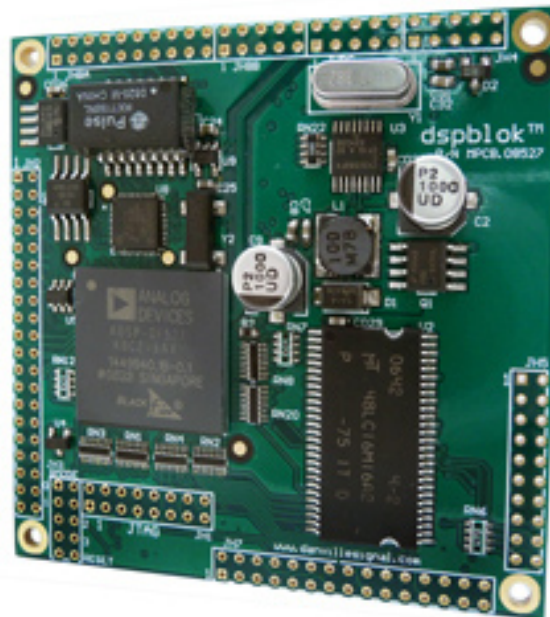


Introducing the dspblok™ 527

- Analog Devices ADSP-BF527 Blackfin DSP
- Small Size (60mm x 60mm)
- Ethernet & High Speed USB 2.0
- Flash, EEPROM & SDRAM Memory
- Programmable Clock
- 3.3V operation
- 2mm Headers for Easy Integration into Custom PCBs
- Supported by dspblok I/O Modules & Power Supplies



The dspblok™ 527 is a highly integrated DSP module that incorporates an Analog Devices' ADSP-BF527 Blackfin DSP, Flash, EEPROM and SDRAM memory and a switching power supply to support the core voltage requirements. All the connections are brought out to standard 2mm dual row header footprints.

The peripheral rich dspblok 527 includes a high speed USB-On-The-Go interface and a 100BaseT Ethernet controller. To use either of these interfaces, simply add a connector. All the supporting circuits are part of the dspblok, which include the magnetics and the clocks.

The on-board programmable clock is very flexible. In addition to supplying the USB, Ethernet and DSP clocks, the clock can be programmed to an arbitrary frequency to drive external circuits.



Product Variations:

600MHz, Comm. Temp P/N A.08527

Accessories:

Danville JTAG Adapter P/N A.08153

Key Components:

Analog Devices ADSP-BF527KBCZ-6AX	Micron MT48LC16M16
Cypress CY22393 Clock Connector	Atmel AT26DF161A Serial Flash
SMSC LAN8700 Ethernet RMII	Microchip 25LC640 Serial EEPROM

Exposed I/O (3.3 V):

PF15 – PF0 (SPORT 0 & 1, PPI)
PG13 - PG0 (PG4-PG1 assigned to SPI)
PH15-PH13, PH11
PPI, PPIFS1
I2C (TWI)
RESET# (Open Drain)
BMODE2-0 (Includes support for onboard flash or external SPI (slave) booting)
DATA BUS (D15-D0, A19-A0, AMS3-AMS0, AOE, AWE, ARDY, ARE)
EXT_WAKE

External Interfaces:**USB 2.0 – High Speed**

USB-On-The-Go support
USB Peripheral support
USB Host support

Ethernet – 100BaseT

Status LED Outputs
On-Board Magnetics
Ethernet Mode selection
External connector (RJ-45) required

Clocks:

Reference Crystal	24.000 MHz
USB	24.000 MHz
Ethernet RMII	50.000 MHz
DSP	24.000 MHz or 22.1184 MHz
External Clock Out	Software Programmable
RTC	32.768 kHz

Size:

60mm x 60mm
Height: 4mm above PCB, 2mm + 4.3mm (mating header) below PCB
PCB Thickness 1.6mm

Connectors:

Dual row 2mm headers

Power Requirements:

3.3V
Optional Battery input for RTC 3.0V



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