

## dspblok™ 21369zx

- Analog Devices ADSP-21369 SHARC DSP
- Small Size (60mm x 60mm)
- Flash, EEPROM & SDRAM Memory
- 3.3V operation
- 2mm Headers for Easy Integration into Custom PCBs
- Supported by dspblok I/O Modules & Power Supplies



The dspblok™ 21369zx is a highly integrated DSP module that incorporates an Analog Devices' ADSP-21369 SHARC 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 dspblok 21369zx is the foundation of our dspstak 21369 family of DSP Engines. You can use a dspstak 21369zx or zx2 with ICE as a development and programming platform for the dspblok 21369zx. Code can be uploaded via RS-232 or USB (zx only) to the dspblok's boot flash memory. JTAG emulator connections are also available.

The dspblok 21369zx is also supported by a family of dspblok power supplies, data converter modules and digital I/O modules. The dspblok ps-usb provides another way to upload code to the dspblok 21369zx. All you need is a simple terminal program and a USB cable to program the on-board flash.



## Product Variations:

Standard – 400MHz, 64Mb SDRAM, Comm Temp 0 to +70 °C	P/N A.08369B
333MHz, 64Mb SDRAM, Ind Temp -40 to +85 °C	P/N A.08369B-ET
400MHz, 128Mb SDRAM, Comm Temp 0 to +70 °C	P/N A.08369B-1
333MHz, 128Mb SDRAM, Ind Temp -40 to +85 °C	P/N A.08369B-1-ET

## Clock Options:

External Clocking (standard)  
22.1184 MHz (append -22.1184 to part number)  
24.576 MHz (append -24.576 to part number)  
25.000 MHz (append -25.000 to part number)

## Accessories:

Danville JTAG Adapter P/N A.08153

## Key Components:

Analog Devices ADSP-21369KBPZ-3A or ADSP-21369BBPZ-2A  
Micron MT48LC2M32 or MT48LC4M32  
Atmel AT25DF041A 4Mb Serial Flash  
Microchip 25LC640 Serial EEPROM

## Exposed I/O (3.3 V):

DAI 20 – DAI 1  
DPI 14 – DPI 7, DPI 4, DPI 3 – DPI 1 (assigned as SCK, MISO & MOSI)  
FLG1, FLG0  
RESET# (Open Drain)  
DSP CLKOUT  
DATA BUS: D31-D0, A23-A0, RD#, WR#, ACK, MS3#-MS1#  
JTAG

## 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 – 400mA Largely dependent on core clock and computation load.  
(See dspblok 21369zx User Manual for more details.)



Danville Signal Processing, Inc.  
29687 82nd Avenue Way  
Cannon Falls, MN 55009 USA

Web: [www.danvillesignal.com](http://www.danvillesignal.com)  
Email: [dsp@danvillesignal.com](mailto:dsp@danvillesignal.com)  
Telephone: 507-263-5854