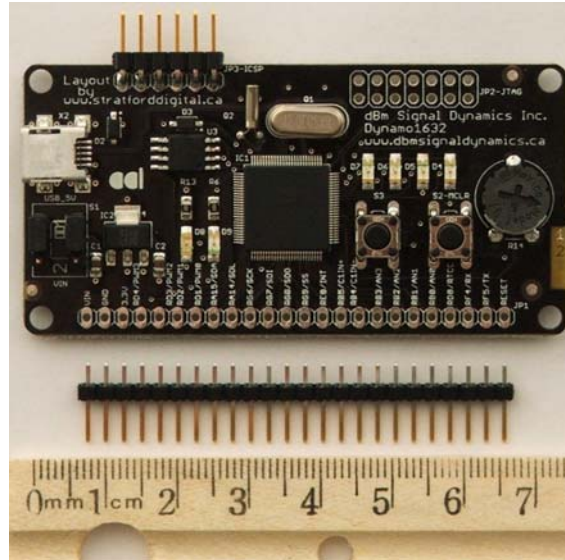


# dBm Signal Dynamics

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## Dynamo1632-P32 Data Sheet (Rev. C)



### Overview:

Dynamo1632-P32 is a small, cost-effective and versatile prototyping platform for USB-based embedded applications. This breadboard-friendly **32-bit processor module** incorporates Microchip Technology's high performance MIPS-Based **PIC32MX460F512L** USB microcontroller, and provides 20 user-accessible I/O pins, as well as 2 Mbytes of non-volatile serial flash memory. A USB bootloader application is provided for convenient loading/execution of .hex files.

### Applications:

USB Protocol Conversion Applications (USB  $\leftrightarrow$  UART, I<sup>2</sup>C, SPI, PWM, Custom)  
Custom USB Peripheral Development  
Solderless Breadboard Prototyping  
Robotics  
Sensor development  
32-Bit MCU (PIC32MX) Learning Platform

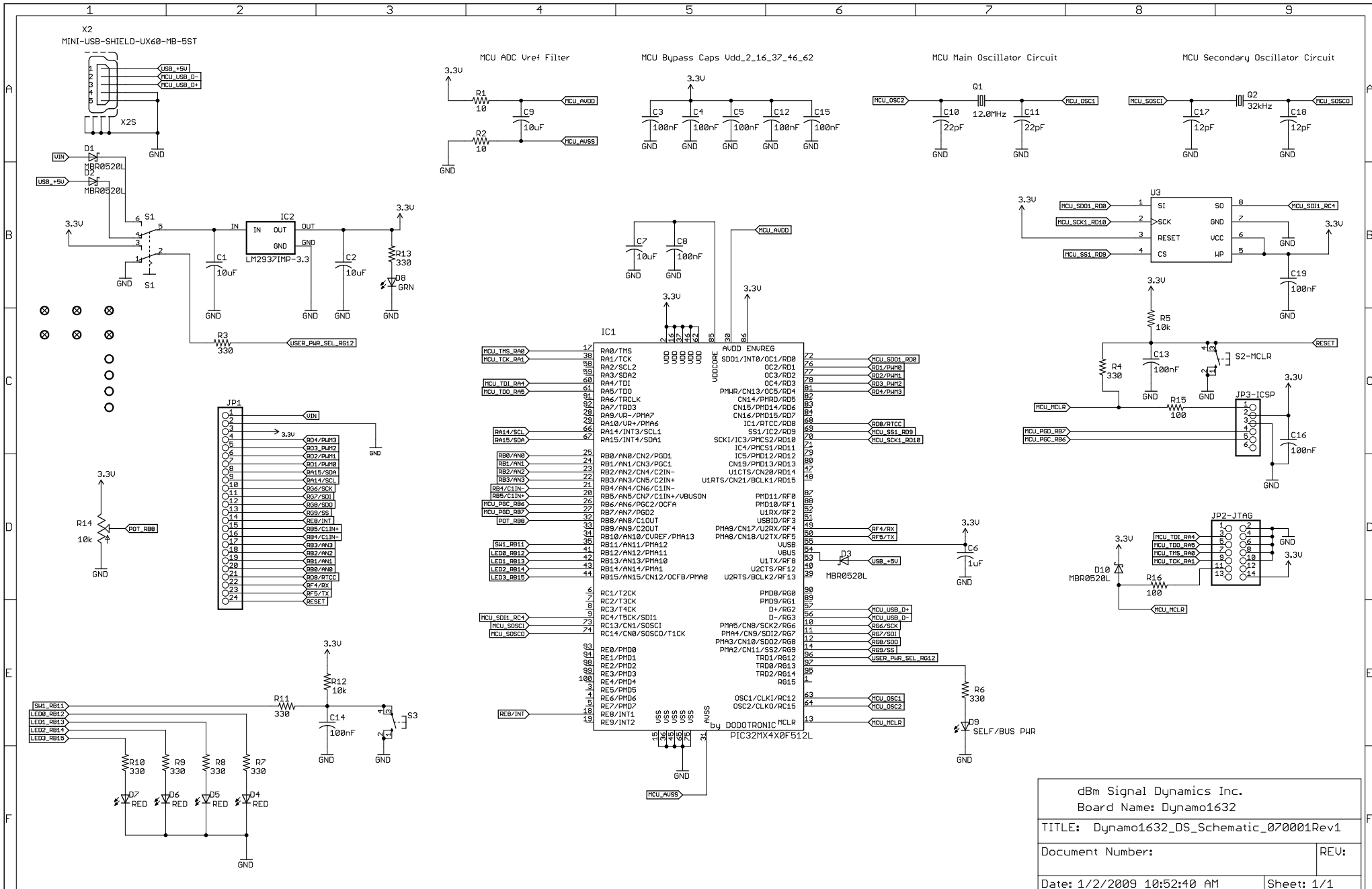
### Specifications:

Board:	RoHS Compliant, 4-Layer.
Microcontroller:	32-Bit: PIC32MX460F512L ( <b>512kB Flash / 32kB SRAM / 80 MIPS</b> )
Operating Temperature:	-40°C to +85°C
Input Voltage:	5-16V (USB or User Supplied Power)
Operating Voltage:	3.3 V (5 V I/O Possible Using Open Drain Port Configuration)
Operating Current (default):	55mA
DC Current/Pin:	18mA (max.)
A/D Converter:	0-3.3V, 10-bit, 500ksps
Dimensions (LxW: in/mm):	(3" x 1.5") / (76mm x 38mm)

### Peripheral I/O Functions Available:

1-Full-Speed USB 2.0 port, 4-A/D Inputs, 1-Real-Time Clock & Calendar Chime Output, 1-Comparator (Vin+, Vin-), 1-Processor Reset Input, 1-External Interrupt Input, 1-I<sup>2</sup>C, 1-SPI, 1-UART, 4-PWM Outputs

# Dynamo1632 Schematic (07-0001 Rev 1)



dBm Signal Dynamics Inc.  
 Board Name: Dynamo1632  
 TITLE: Dynamo1632\_DS\_Schematic\_070001Rev1  
 Document Number: REU:  
 Date: 1/2/2009 10:52:40 AM Sheet: 1/1