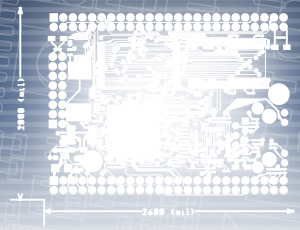
NetBurner
Networking in 1 Day!



Features

- Companion development kit includes all of the hardware and software you will need to develop embedded applications. This includes an RTOS, TCP/IP, Web Server, C/C++ Compiler, IDE, Graphical Debugger, configuration and deployment tools.
- Start writing your application code immediately, instead of integrating development tools or building custom hardware.
- Use as a high-performance single board computer, or as a network interface processor.
- Module supports 3 serial ports, 16 timers, address bus, data bus, GPIO, A/D, CAN, SPI, I2C, interrupts, PWM and more.
- Integrated 66Mhz 32-bit Coldfire 5282 processor with integrated 10/100 Ethernet and MAC.
- 8MB SDRAM, 512K of Flash Memory.
- Temperature Range:
  0°C to 70° C Commercial
  -40°C to +85° C Industrial

MOD5282
NetBurner's High Peformance Embedded Network Core Module

Introduction

The MOD5282 processor modules are low cost, high performance single board computers that are excellent solutions to network-enable both existing and new product designs with 10/100BaseT Ethernet. Based on the Freescale ColdFire 5282 32-bit processors with integrated 10/100 Ethernet MAC, they have plenty of horsepower for the most demanding applications (rated at 60+MIPS with 66MHz clock).

Network-Enable New or Existing Applications

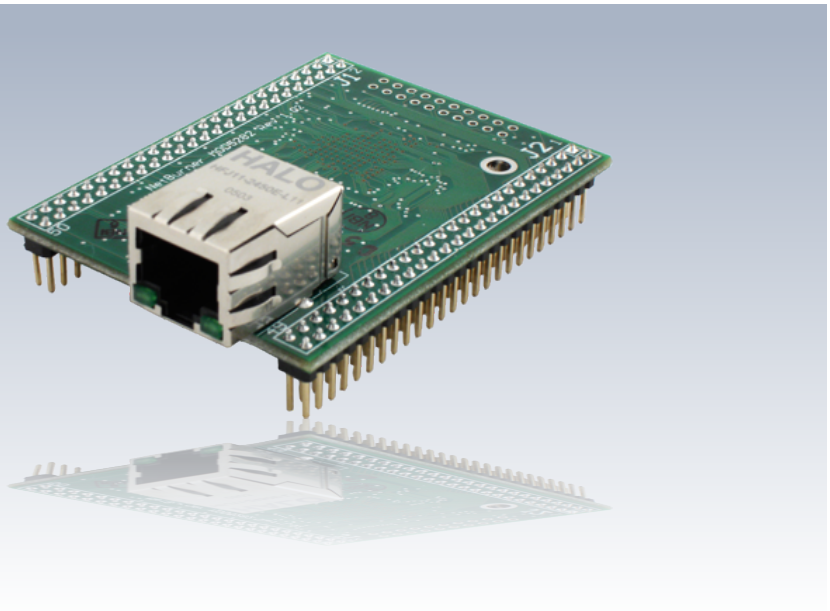
Add a module to an existing application, network enable your device though its serial ports, GPIO pins, or serial bit streams. If you have an application-specific motherboard, you can add a module and have a powerful processing platform that can function as the control processor for your product, or as a low cost network interface processor.

Customize to Suit Any Application

The NetBurner Network Development Kit enables you to quickly and easily create custom applications. NetBurner has a solid reputation for development platforms to facilitate rapid product development, and the module kits are no exception. The kit includes the MOD5282 module, development board, TCP/IP Stack, uC/OS Real-time operating system, Web Server, GNU C/C++ compiler and linker, GDB graphical debugger, end-user device configuration, flash update utilities, and much more.

Real 32-Bit Performance

Traditionally, companies using 8 and 16-bit platforms find it nearly impossible to run resource-intensive applications on fast Ethernet connections. The NetBurner Embeded Network Core Module features a Web-based control interface, a full 32-bit architecture providing 60+ MIPS, and the ability to send and receive email. This processing platform provides the horsepower to handle both 10/100 Ethernet connections and resource-demanding applications with ease and flexibility.

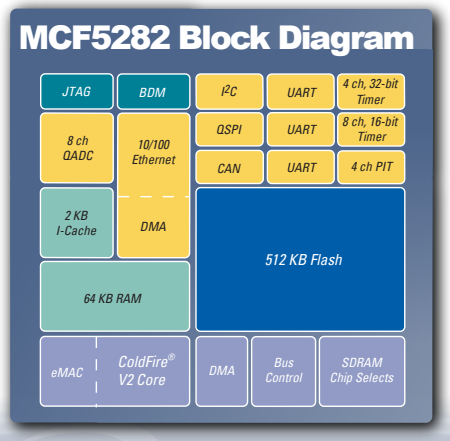


MOD5282 Pinout and Signal Description

MOD5282 Pin	Header J1	Header J2
1	GND	GND
2	GND	VCC3V
3	VCC3V	URXD0
4	R/*W	UTXD0
5	*CS1	ADVCC
6	*CS2	AN3
7	*CS3	AN1
8	*OE	AN2
9	BS2	AN56
10	BS3	AN0
11	*TIP	AN53
12	D16	AN52
13	*TA	AN55
14	D18	GND
15	D17	GPTA3
16	D20	GPTB3
17	D19	GPTA2
18	D22	GPTB2
19	D21	GPTA1
20	D24	GPTB1
21	D23	URXD1
22	D26	UTXD1
23	D25	GPTA0
24	D28	GPTB0
25	D27	SPI_CLK
26	D30	SPI_CS3
27	D29	SPI_DIN
28	*RSTI	SPI_DOUT
29	D31	TIN2
30	*RSTO	SPI_CS0
31	CLKOUT-66.355MHz	TIN0[2]
32	A0	DTOUT3
33	A1	DTOUT2
34	A2	DTOUT1
35	A3	SPI_CS2
36	A4	DTOUT0
37	A5	TIN1[2]
38	A6	TIN3[2]
39	A7	SDA/URXD2[1]
40	A8	SPI_CS1
41	A9	CANRX/URXD2[1]
42	A10	SCL/UTXD2[1]
43	A11	*IRQ1
44	A12	CANTX/UTXD2[1]
45	A13	*IRQ3
46	A14	GND
47	A15	*IRQ5
48	VCC3V	*IRQ7
49	GND	GND
50	GND	VCC3V

[1] The third UART (UART2) can be routed to either of the two pin configurations: replacing CAN RX andTX, or I2C SDA and SDL.

[2] TIN0, TIN1 and TIN2 can be used as external baud rate clocks for UART0, UART1 and UART2



Specifications

Processor
32-bit Freescale ColdFire 5282 running at 66MHz

Software Development
NetBurner Network Development Kit includes: MOD5282 module, development board, TCP/IP stack, Web Server, real-time operating system (RTOS), ANSI C/C++ compiler and linker, assembler, graphical debugger, integrated development environment (IDE), code update, configuration, and deployment tools.

Network Interface
10/100 BaseT with RJ-45 connector

Network Protocols Supported
Complete protocol support included. Please reference NetBurner Software Datasheet (www.NetBurner.com)

Connectors
Two dual inline 50-pin headers

Physical Characteristics
Dimensions: 2.0″ x 2.6″
Mounting Holes: 2 x 0.125″ dia

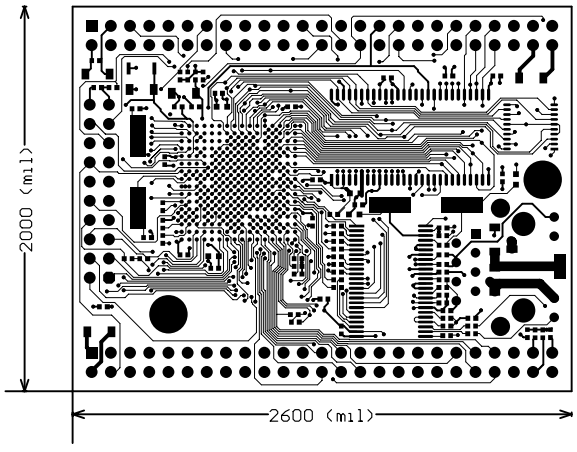
Power Requirements
DC Input Voltage: 3.3V @500mA

Environmental Operating Temperature
0°C to 70°C Commercial
-40°C to 85°C Industrial

Part Number and Description

MOD5282-100CR	Core Module RoHS Compliant
MOD5282-100IR	Core Module Industrial Temperature RoHS Compliant
NNDK-MOD5282-KIT	Development Kit

MOD5282 Mechanical Diagram



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