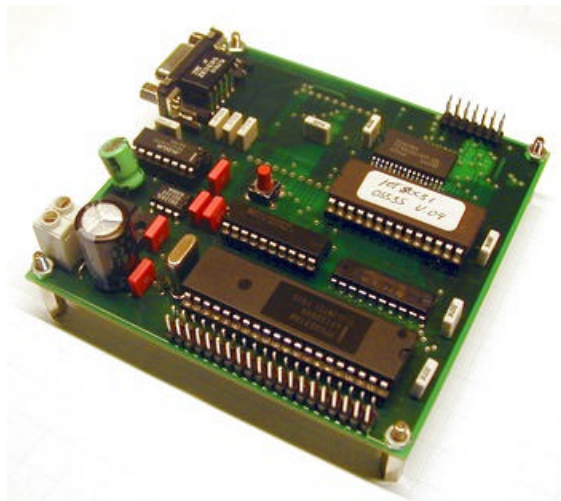


IET80C31, 80C31/Ethernet Development Kit



General

The iet80c31 development kit is a low cost/high performance kit for developing and evaluating embedded Ethernet solutions. The kit is equipped with a 256Kbit EPROM, 1 Mbit SRAM and the popular iet8900 10-Mbit Ethernet module. Of the 32Kbyte EPROM on board only a small portion of it actually occupies the program/data storage area, leaving a lot of RAM for your applications.

In the kit you will also find the highly optimizing C-compiler/debugger package uC/51. The kit comes in three versions; -1 has a limited version of the compiler/assembler which only allows you to produce up to 8Kbyte of code. While this is often enough for small projects it might be a little when working on networking applications. For this purpose we also provide a -2 version, which contains the full-blown compiler/assembler debugger package, with no limitations.

Hardware

The processor included in the kit is a Philips standard 16MHz 80C31 that will do TCP/IP networking quite happily. If you are interested in more performance the Philips device could be substituted for a faster version of the MCU from Dallas Semiconductor. The kit and software has been tested with this processor and works flawlessly. Two connectors have been provided for the user to access the address and data bus as well as some I/O signals from the MCU. All addressing and

generation of peripheral control signals is done in a programmable logic device, which can be reprogrammed by the user to fit his/her own need.

Memory

The memory map is configured as a common program and data area, allowing the processor to execute code from SRAM. Although the SRAM on board is 1Mbit (128 Kbyte) only 62Kbyte is available to the user as the High Level Language debug monitor takes 2Kbyte and 64Kbyte is unmapped. This is quite much though and will easily fit a TCP/IP stack, web server and a lot of web pages.

Software

The kit comes in three versions:

- 1 Demo version of the C-compiler
- 2 Non demo version of the C-compiler.

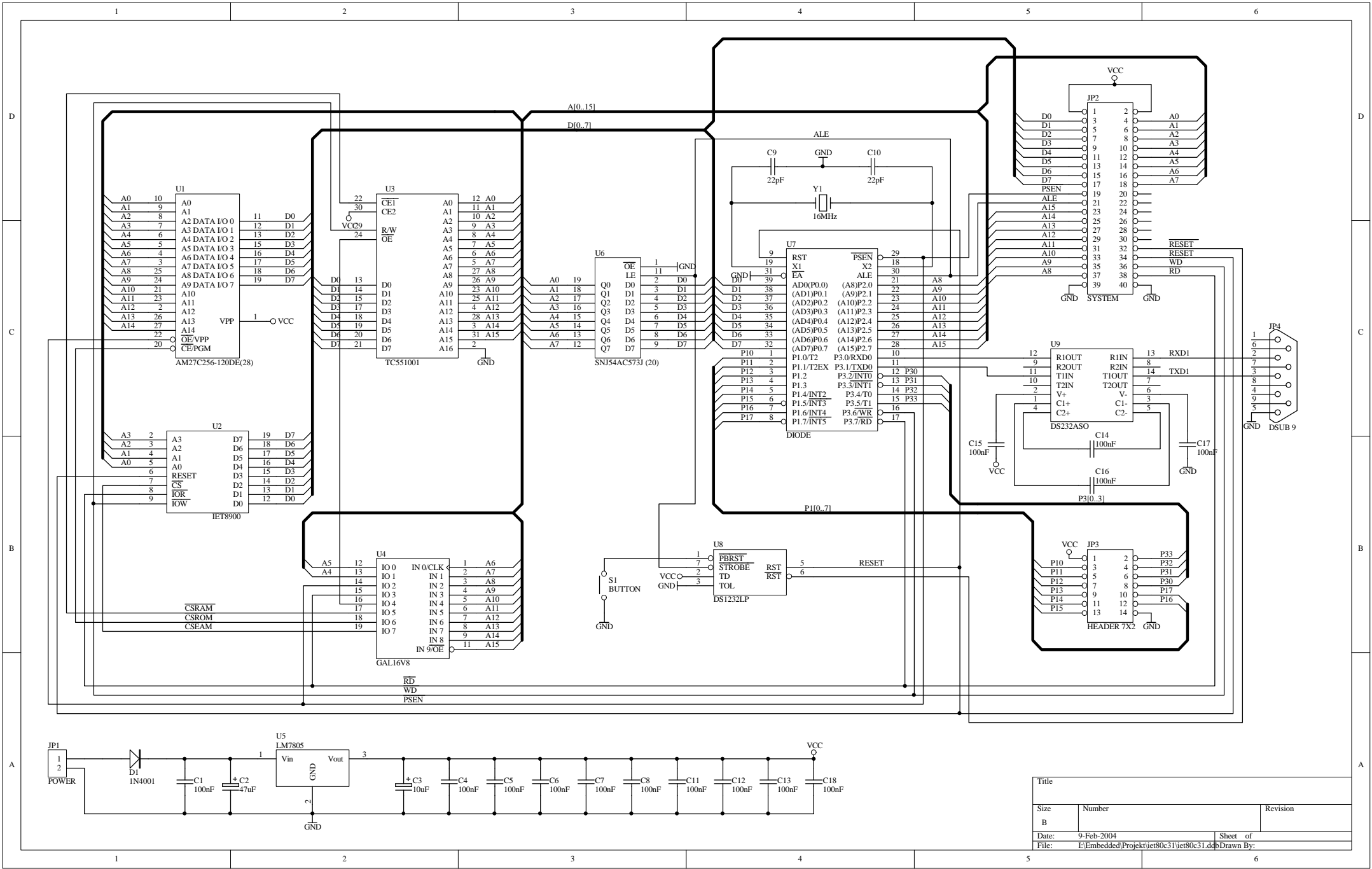
We also provide a version without software for the user that already have all necessary tools. The hardware is the same in all kits. In kits -1 and -2 we have also included a demo project on the CD-ROM which runs a simple TELNET server and a WEB server with a few fixed web pages.

Technical Data:

Measures (mm): 100 x 100
Connector 1: Standard RJ45
Connector 2: 40-pin 2 row header
Connector 3: 14-pin 2 row header
Ethernet Chip: Cirrus Logic CS8900A
Processor: 80C32 – 14,74560 MHz
SRAM: 62 Kbyte available
Power: 8-15 Volts DC

Ordering Information:

IET80C31, Kit without any software
IET80C31-1, Kit with demo software
IET80C31-2, Kit with non-demo software



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