ATmega128 DIP Breadboard Adapter

Atmel's ATmega128 AVR microcontroller is a 64 pin device that is only available in surface mount packages. Therefore, prototyping with it would normally require that a custom printed circuit board be manufactured. And for the hobbyist, PCB fabrication is usually out of the question. Custom PCBs are expensive, especially when later revisions require that new boards be made. To alleviate this problem, the ATmega128 DIP Adapter was developed. Simply put, it allows the ATmega128 microcontroller to be used on a solderless breadboard.

Features:
The ATmega128 DIP Adapter is a small board containing an Atmega128-16MC, a 16MHz system clock crystal, and a 32.768kHz timer crystal. Every pin of the Atmega128 is brought out to the bottom header pins, which are placed in a .6" wide DIP layout.

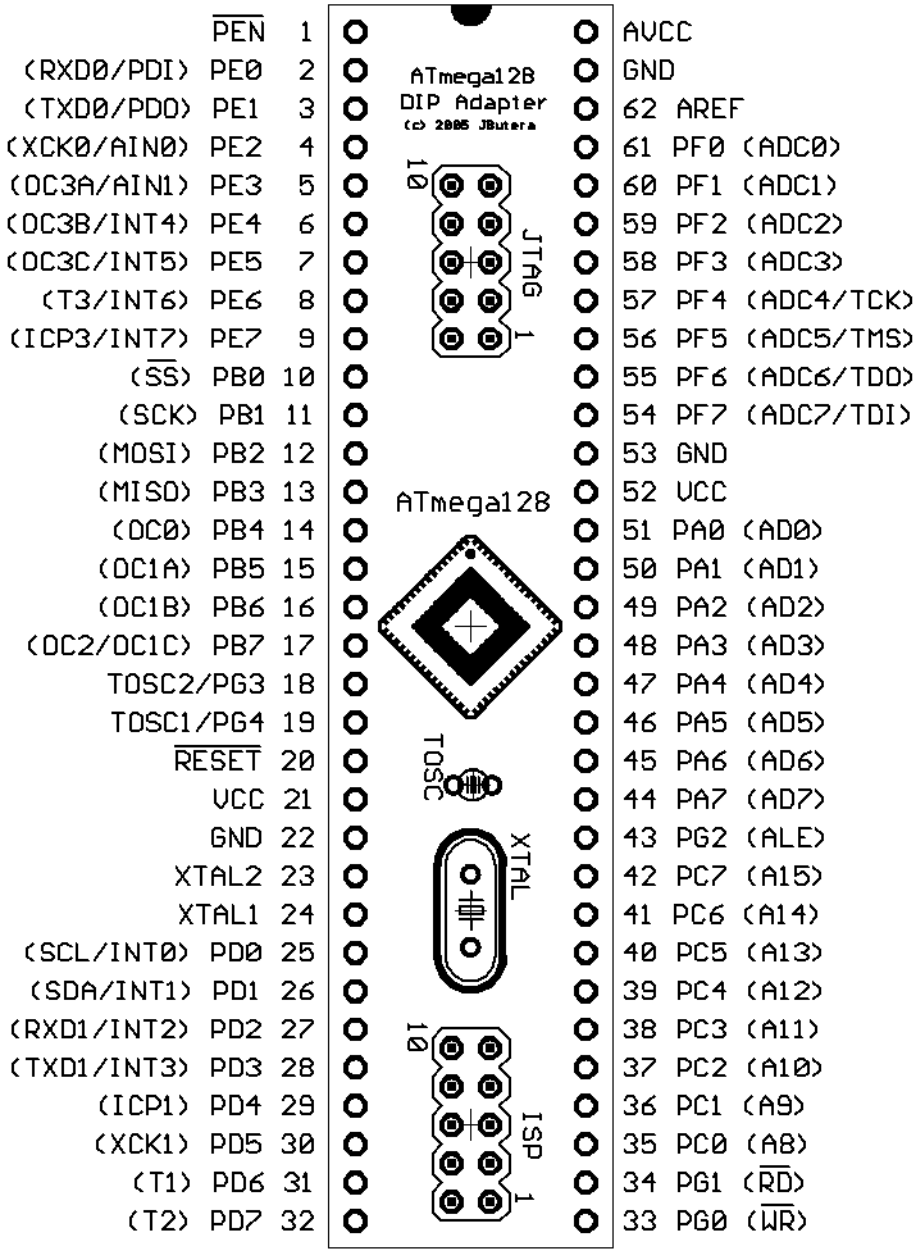
The ATmega128 DIP Adapter includes:

- Atmel ATmega128-16MC AVR microcontroller
- .6" x 3.2" 64 pin DIP layout
- 16MHz main crystal
- 32.768kHz timer crystal
- In-System Programming (ISP) header
- JTAG debugging header

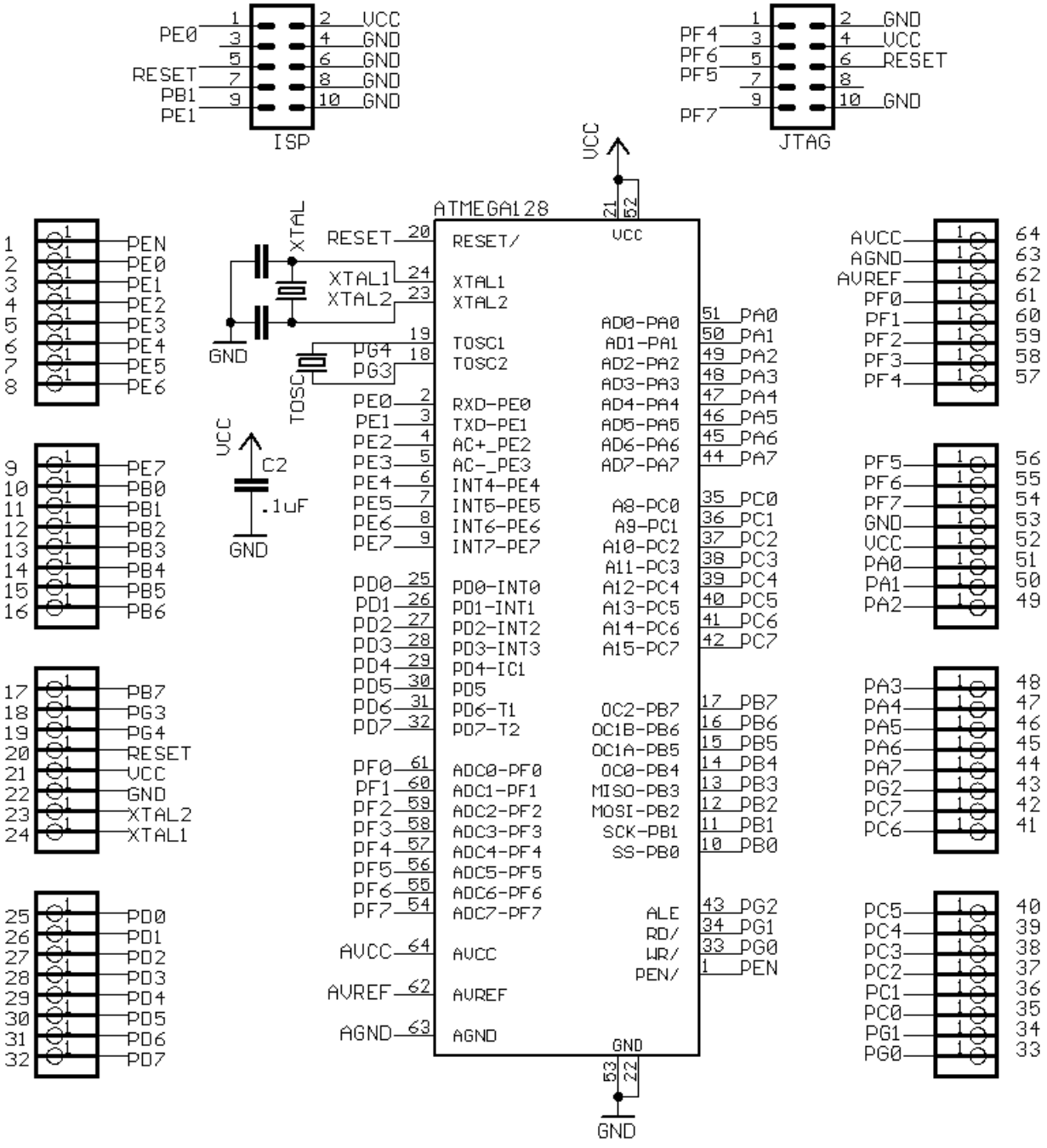
Programming:
The ATmega128 DIP Adapter includes a standard 10-pin ISP header compatible with the STK500 and many other programmers. Schematics for a simple programmer can be found at <**http://www.lancos.com/e2p/avrisp-stk200.gif**>. For homemade programmers such as the one found at lancos.com, various software packages can be used such as PonyProg, avrdude, or uisp. PonyProg is a graphical Windows application, while avrdude and uisp are both open source, command-line applications.

In addition to the ISP header is a 10-pin JTAG header which can be used for in-system debugging with Atmel's JTAG-ICE tool.

ATmega128 DIP Adapter Layout:



Atmega128 DIP Adapter Schematic:



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