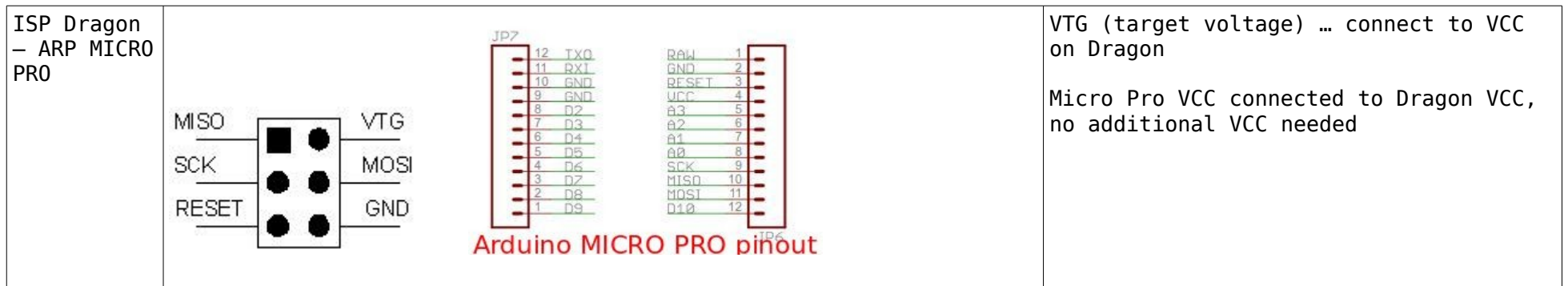


Debug AVR MICRO PRO CLIL ;-)

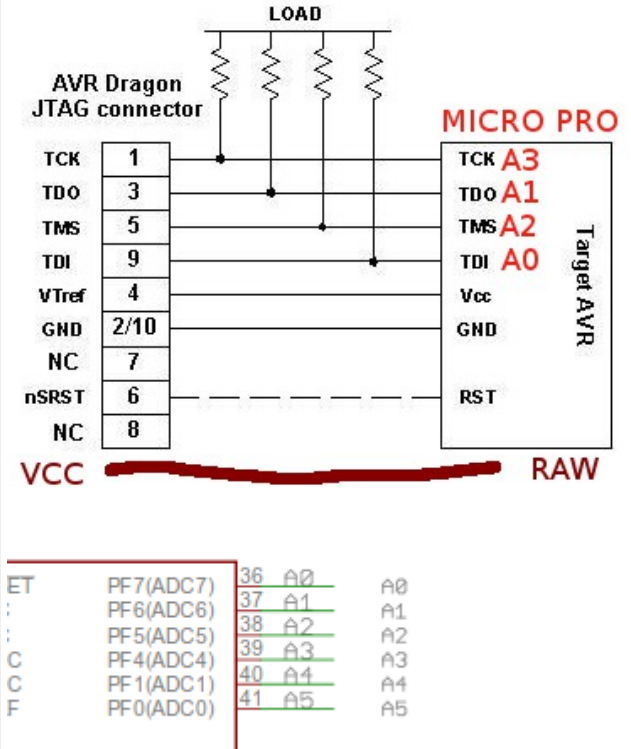
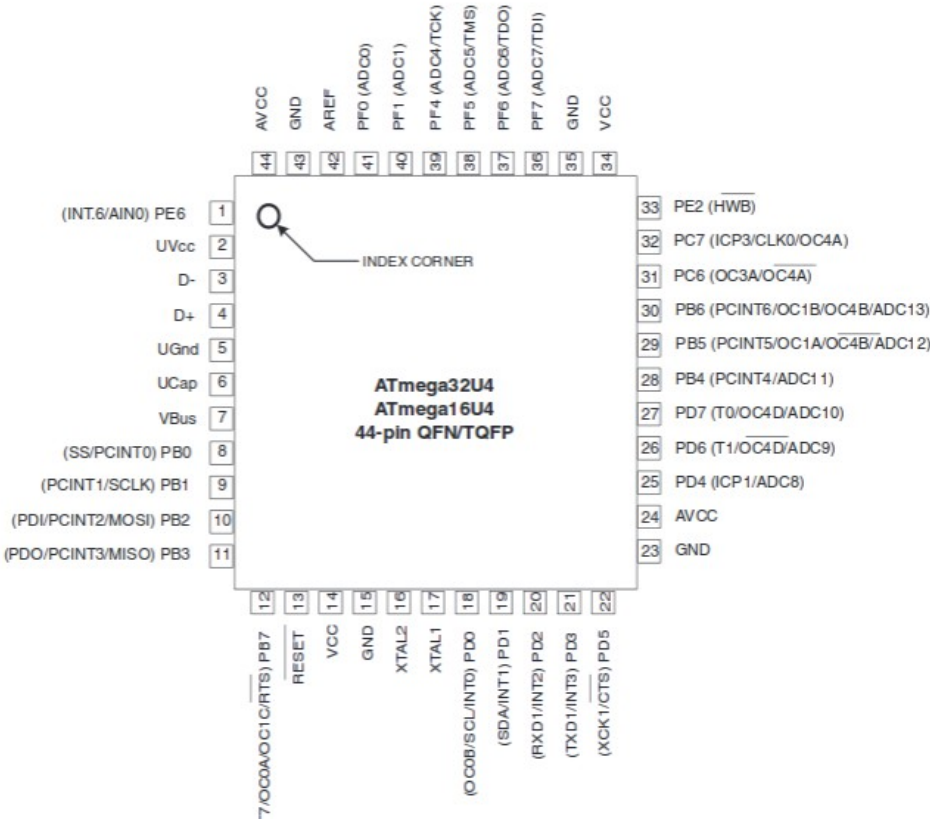
AVRSTUDIO can debug MICROPRO boards by using AVR Dragon ICE (tested with Studio 6.2 beta March 2014).

1. Burn Fuses JTAGEN and OCDEN by connecting ISP (burning JTAGEN by JTAG interface not possible)
 1. Avrstudio //Tools/Device Programming
2. Connect JTAG and ARDUINO
3. Connect nSRST on Dragon and RESET on Micro, then AVRSTUDIO can reset the MICRO PRO automatically
4. no Optimisation //Project/Properties/Toolchain/Optimization
5. Select Debugger: //Project/Properties/Tool
 1. Dragon / JTAG / Clock 2.00MHz / Use external reset yes
6. Set a breakpoint
7. Start debugging



JTAG –
Dragon -
AVR Micro
Pro

Figure 1-1. Pinout ATmega16U4/ATmega32U4



AVR Fuses

JTD	JTAGEN	OCDEN	DESCRIPTION
U	U	U	No JTAG programming, OCD or Boundary-Scan is possible
U	U	P	No JTAG programming, OCD or Boundary-Scan is possible
U	P	U	JTAG Programming and Boundary Scan is possible, OCD disabled
U	P	P	OCD, JTAG Programming and Boundary-Scan is Enabled (Note 1)
P	U	U	No JTAG programming, OCD or Boundary-Scan is possible
P	U	P	No JTAG programming, OCD or Boundary-Scan is possible
P	P	U	No JTAG programming, OCD or Boundary-Scan is possible
P	P	P	No JTAG programming, OCD or Boundary-Scan is possible
Note 1: Do not ship the device in this state, as it will consume more power, and is open for hacking :-)			