



## C8051F020 UNI PROTOTYPE BOARD USER'S GUIDE

## 1. Summary

The UNI Prototype Board provides easy development and debugging of applications on the C8051F020 microcontroller through use of a JTAG debug header and direct through-hole access to each pin.

## 2. Features

- C8051F020 MCU
- JTAG debug header
- 0.1-inch center through-hole access to each pin
- Access to V<sub>DD</sub> and DGND for an external voltage supplier

## 3. Hardware Setup

A USB Debug Adapter or EC2 Serial Adapter may be used to connect through the JTAG interface as shown in Figure 1. Power to the device must be supplied externally through pin  $V_{DD}$  on J6.

- 1. Connect the 10-pin ribbon cable from the debug adapter to the JTAG interface.
- 2. Connect the other end of the debug adapter to the appropriate port on the PC.
- 3. Connect an external power supply to the device by connecting the grounding cable to pin DGND on J6 and the power cable to pin  $V_{DD}$ .
- 4. Set the power supply voltage to +3.3 V.
- **Note:** Ensure the power supply is off when connecting or disconnecting cables to the device in order to prevent accidental damage to device and/or debug adapter.



Figure 1. UNI Prototype Board Hardware Setup

USB Debug Adapter		
Pin #	Description	
1,8	Not Connected	
2,3,9	GND (Ground)	
4	TCK (C2D)	
5	TMS	
6	TDO	
7	TDI (C2CK)	
10	USB Power	

Table 1. Adapters

EC2 Serial Adapter		
Pin #	Description	
1	3.0 to 3.6 VDC Input	
2,3,9	GND (Ground)	
4	TCK (C2D)	
5	TMS	
6	TDO	
7	TDI (C2CK)	
8,10	Not Connected	

