



#### **Expansion For**



#### Features

- Fine pitch 20-pin and 50-pin I/O Connection to uEZGUI host board
- 70 pin expansion breakout of all I/O from uEZGUI host board
- High-speed 4-bit microSD card breakout for use with LPC1788 based uEZGUI units
- RS232 Serial Communication via DB9 (optional)
- Power status LEDs (optional)
- DC Power Jack for external Wall Power (optional)

# **Example Connections to a uEZGUI Board**





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## Expansion Board for uEZ<sup>®</sup> GUI Family **UEZGUI-EXP-BRKOUT**

### Features

The **uEZGUI-EXP-BRKOUT** is designed to facilitate ease of use in creating expansion boards and prototyping hardware for use with FDI uEZGUI units. The uEZGUI-EXP-BRKOUT features a breakout to standard-size 0.1" header pins of all 70 expansion connections from a uEZGUI unit. In addition, the uEZGUI-EXP-BRKOUT features an optional RS232 port for PC communication. The RS232 port also has load options to use with Flash Magic as an ISP programmer over an RS232 port.

There are optional power status LEDs on the board, as well as an optional 5V input power connector for powering the development system.

In addition there is a microSD slot included that allows for the use of high-speed 4-bit SD mode. This will allow for 15 fps video playback on compatible LPC1788 based uEZGUIs.

#### Flex cables sold separately

To connect the uEZGUI-EXP-BRKOUT to a uEZGUI host unit, 50 and/or 20 pin flex cables will be needed. Please see the following part number examples. There are multiple manufacturers and lengths available for these 0.5 mm Flat Flex Cables (FFCs). It is recommended not to exceed 3" long cables, but the actual maximum acceptable length depends on the application.

Manufacturer PN	Digikey PN	Cable length	Pin number
Molex 21020-7650	WM10231-ND	3"	50
Molex 21020-3050	WM14323-ND	1.18"	50
Molex 0210200209	WM10226-ND	3"	20
Molex 0210200205	WM14317-ND	1.18"	20

The uEZGUI-EXP-BRKOUT ships with parts loaded to utilize the high speed microSD card in 4-bit SD mode. If this board is used with a uEZGUI that already has a high speed microSD card, then it is recommended to remove resistors R7 – R12 to use other functions on those pins.

To use the RS232 port, ISP feature, or the power supply, parts will need to be soldered onto the board. See the schematic for details.

If the power supply is loaded onto the board, it accepts 5V 1A minimum power into a 2.1 mm center positive barrel plug. This power connector does not provide any step-down conversion from higher voltages, so the required range is SV 15%.

# Ordering Information

Part Number: uEZGUI-EXP-BRKOUT Suggested Resale Price: \$39.00 USD Order Online at: www.uezgui.com or from any of our franchised distributors.

Warranty: 30-day money back guarantee Phone 256-883-1240 Fax 256-883-1241 sales@teamfdi.com www.teamfdi.com Kit Contents: • uEZGUI-EXP-BRKOUT Board



Download Users Manual, documents, schematics, and software examples at: www.uezgui.com



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