## **EposMoteIII Expasion Boards**

This is a list of EposMoteIII's Expasion Boards, there are status information, key electronic components and link to board's full information (for finished boards).

**EposMotelII Expasion Boards Outputs Pins List** 

#### JTAG Board

- Status: prelimary layout tested, waiting prototype batch fabrication.
- Key components:
  - Connector Header 20 Positions .100 pitch (JTAG 20 ARM).
  - 2x Connector Header .100 pitch.
  - 6 pins Connector Header for UARTO (VCC, GND, TX, RX, CTS and RTS).
- Projects: EposMoteIII
- Board's full information: board finished, writing page about the connections.

#### IR Remote Controller / Air Conditioner Controller Board

- Status: board finished, waiting for prototype PCB batch.
- Key components:
  - SN74HC367 Buffer and Line Drivers with 3-state outputs.
  - TSAL6200 InfraRed LED.
  - TSOP58438 InfraRed Receiver.
  - ∘ 8 pin expansion I/O for keypad.
- Projects: EposMoteIII, SmartBuilding
- Full information: board finished, writing board details page.

#### Serial Communication Board

- Status: circuit requirements specification
- Key components (not concluded):
  - ∘ SPI to CAN IC (MCP2515):
  - CAN Drivers IC:
  - LIN Physical Interface (SN65HVDA100-Q1);
  - ∘ UART to EIA232 IC (TRS3221);
  - UART to EIA485 IC (MAX14853).
- Projects: EposMotelII, Electric Kart
- Full information: board not finished.

### Data Logger Board

- Status: circuit requirements specification
- Key components (not concluded):
  - CPLD IC;
  - Flash Memory IC.
- Projects: Torsional vibration wireless monitoring
- Full information: board not finished.

### **Battery Monitor Board**

- Status: prototype fabricated, not fully tested.
- Key components:
  - LTC2943 IC: Multicell Battery Gas Gauge;

- (2x) Cold-Junction Compensated Thermocouple-to-Digital Converter
- Projects: Hidrologic Station.
- Full information: board not finished.

## LiPo Battery Monitor Board

- Status: circuit requirements specification
- Key components (not concluded):
  - LiPo Battery Monitor IC;
- Projects: Quadcopter.
- Full information: board not finished.

# Load Cell Signal Conditioning Board

- Status: circuit requirements specification
- Key components (not concluded):
  - HX711 IC: 24 bit analog-to-digital converter (ADC) for weigh scales.
- Projects: Bee Keeping Monitor.
- Full information: board not finished.