EposMoteIII Expansion Boards

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

EposMoteIII Expansion Boards Outputs Pins List

JTAG Board
- Status: preliminary 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 UART0 (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: 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: EposMoteIII, 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.

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