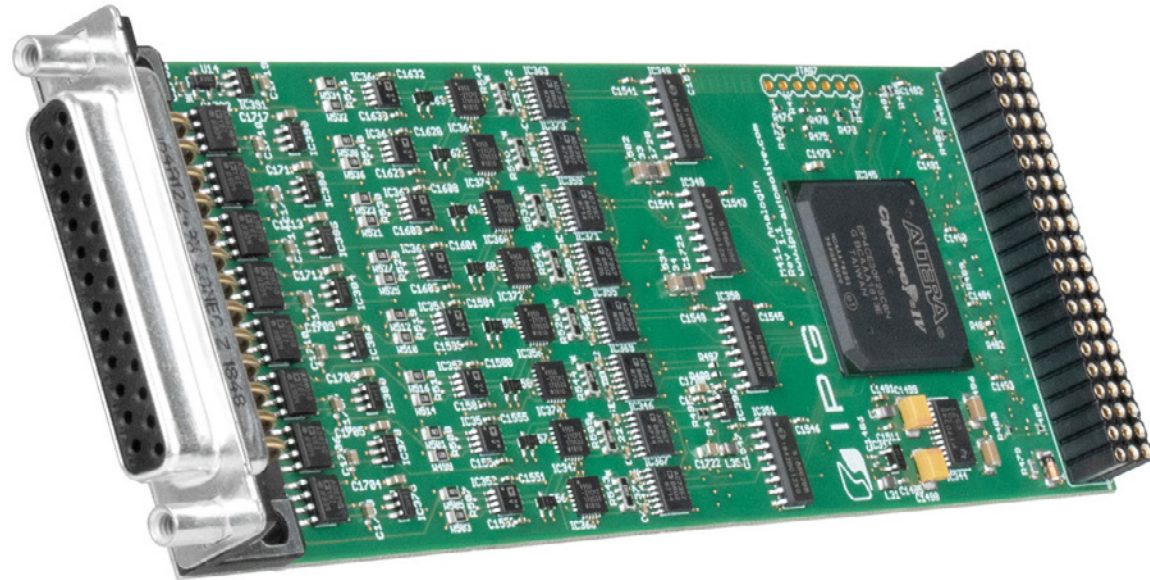


## M411 – Power Monitor



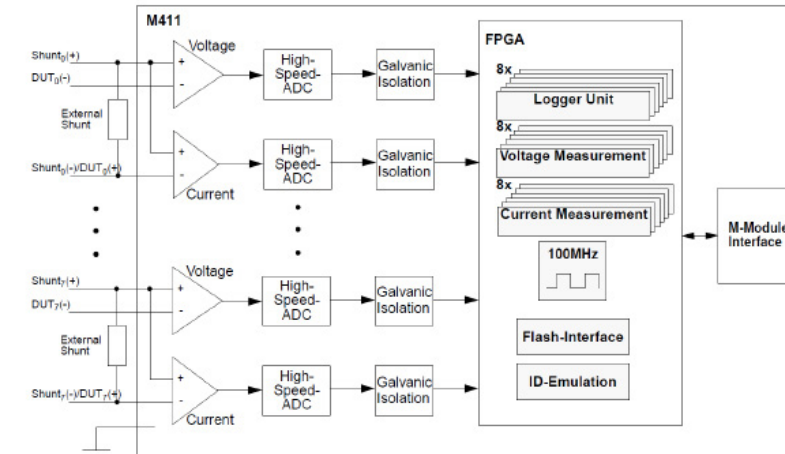
### Features

- 8 differential voltage measuring channels
  - Input voltage range -25V .. +25V with lowside current monitoring
  - Input voltage range -14V .. +30V with highside current monitoring
  - Resolution: 14bit
  - Accuracy: +/- 1% (measured value) +/- 3mV
- 8 Current measuring channels
  - Input voltage range on shunt -40mV .. +40mV
  - Current range and accuracy depend on external shunt resistor
  - Resolution: 14 bit
  - High- and low-side current monitoring possible
- Synchronous sampling of current monitoring possible
- Galvanic isolation
- Usable for power and energy monitoring
- Sampling rate 300kHz
- Adjustable timestep size for logging to up to 200kSPS

### Use Cases

- Testing the behavior of airbag ECUs after airbag ignition
- Logging the envelope of voltage and current for up to 20 ms at 100kHz sample rate on all channels synchronously

### Block Diagram



### Technical Data

Input channels	<ul style="list-style-type: none"> <li>• 8 differential voltage measuring channels</li> <li>• 8 current measuring channels</li> </ul>
Input voltage range	<ul style="list-style-type: none"> <li>• Input voltage range -25V .. +25V with lowside current monitoring</li> <li>• Input voltage range -14V .. +30V with highside current monitoring</li> </ul>
Input current range	<ul style="list-style-type: none"> <li>• Depending on used shunt</li> <li>• Voltage range on shunt -40mV .. +40mV</li> </ul>
Input voltage resolution	14 bit
Input current resolution	14bit
Sampling rate	300 kHz
Logging timestep	1kSPS .. 200 kSPS
Buffer size	2048 pairs of voltage and current, e.g. 20ms at 100kSPS
Connector	25-pin D-Sub connector (female)

### Order Information

Order Number	IO-M411
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