

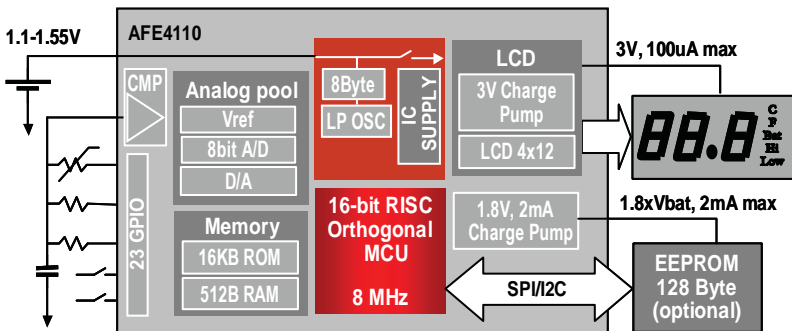
Product Announcement

Introducing AFE4110 as bare die product from Texas Instruments

The AFE4110 is a highly integrated low power, low cost MCU with on-chip LCD driver. The product is ideal for low power, data acquisition applications that require small size, high integration and LCD functionality.

Specification includes:

- o 16-Bit RISC Architecture (8MHz CPU clock and peripherals)
- o 16kB ROM/ 512B RAM (16KB ROM / 14KB RAM devel. version)
- o Ultra Low supply-voltage range (1.1V to 1.55V)
- o Low Power Consumption
- o Compact Clock System
- o LCD driver for up to 4x12 segments with internal 3V60µA charge pump
- o 2 16-bit Timer0_A3 with 3 CC registers
- o Programmable comparator, Voltage monitor
- o Full Four wire JTAG debug interface
- o ULV-Brownout Circuit (BOR)
- o ULV-RAM retention Voltage below BOR-levels
- o 32-Bit watch dog timer (WDT-A)
- o ULV Port Logic
- o External serial EEPROM support
- o Bootstrap loader in Development/prototyping Device



Benefits/Features

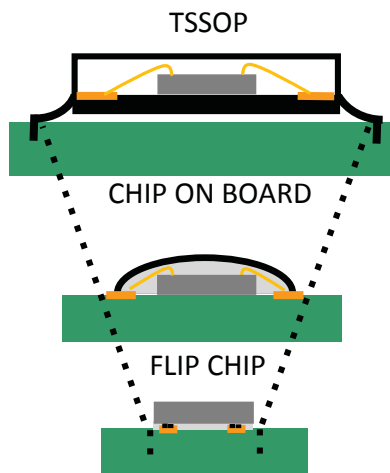
- Based on MSP430L092 Core
- Up to 8MHz operation
- Enables Single 1.5V battery
- LCD 4 X 12
- Charge pump for ext. EEPROM support: 8mA, 1.8 x Vbat
- 0.3% accuracy oscillator without external xtal
- Die size 2.2 x 2.7mm

Applications include:

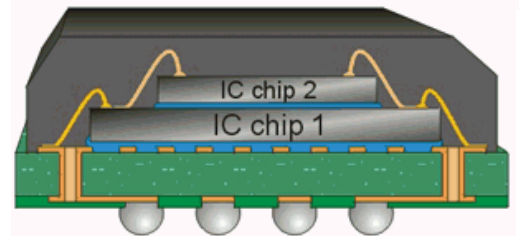
- Thermometer
- Processing unit for other AFEs
- Very low cost applications
- Wireless Sensors

AFE4110 FEATURES	
ROM	16K
RAM	14.5K, 0.5K
Peripherals HV Charge Pump	1.8-2.2V, 8mA
LCD-B	Yes, 4x12
Internal Load Switch	Yes, 30hm
Deep Slip mode	Yes, 8 Byte RAM, 1Khz OSC
GPIO	23
Operating Voltage	1.1-1.55V
Operating temperature	0-55
Max Operating Frequency	8MHz
HF OSC	4.4MHz
32KHz XTL support	Yes
8KHz +/-0.3% OSC	Yes, ext Resistor 0.1%
1KHz ULP Oscillator	Yes, 30nA
SPIBL (EEPROM)	Yes, no external parts (EEPROM only)
Pads layout format	2 lines
Die Size (C035)	2.2-2.7sqmm

Size Reduction



Stacked MCP



Lateral MCP

