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Microcontroller Selector

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ATM90E2x Demo Board

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ATM90E2x Single-Phase Energy Metering Demo Board is used for the demo and testing of ATM90E2x (single-phase energy metering AFE chip of Atmel), which can sample single-phase voltage and current, meter active/reactive energy and output active/reactive energy pulses accordingly, as well as measure parameters such as voltage, current and power.

The AFE Control Board - SAM4C communicates with and controls the AFE board, providing easy access to evaluate the energy metering chips.

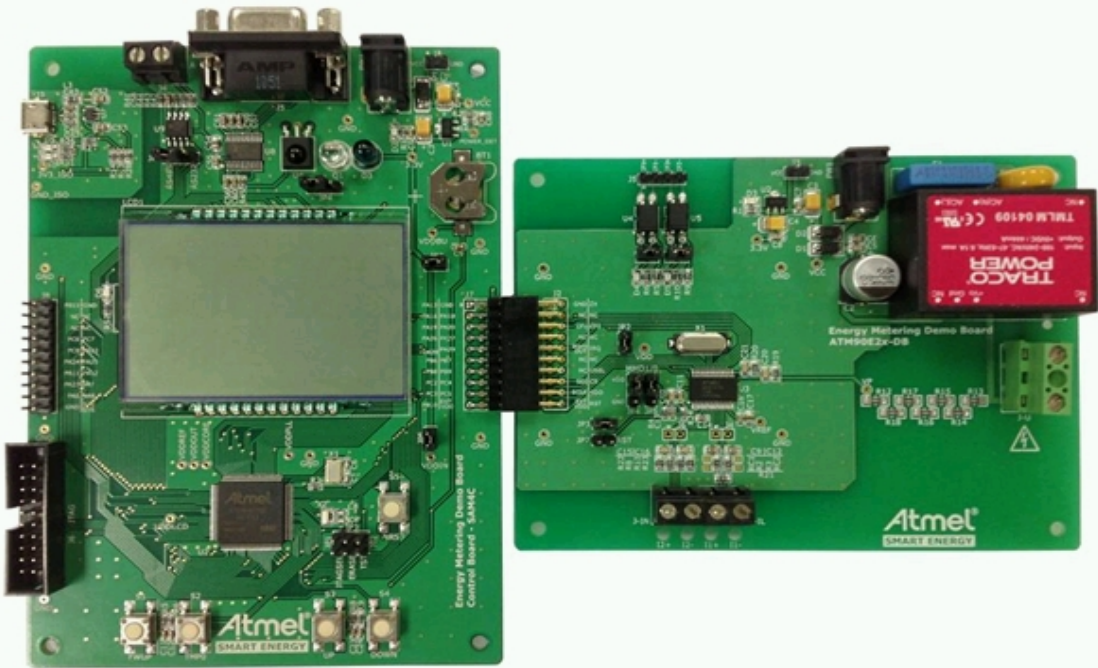
Key Features

- AFE Board
 - **ATM90E26: single-phase energy metering AFE chip**
 - **Voltage sampling: resistor divider network**
 - **Current sampling**
 - Shunt resistor or Current Transformer (CT) for L line current
 - Current Transformer (CT) for N line current
 - **Energy pulses**
 - Active energy pulse indicator and isolated output
 - Reactive energy pulse indicator and isolated output
 - **One communication connector**
 - **Crystal: 8.192MHz**
 - **Power supply for demo board**
 - AC 100V-240V line voltage input
 - DC 9V power input
 - External 3.3V input
- Control Board
 - **Atmel® SAM4C microcontroller**
 - **Two possible power sources**
 - External DC9V
 - External 3.3V from the daughter board
 - **Digital I/O**
 - Five mechanical buttons
 - One reset button
 - Two switch buttons for display (including forward and backward button)
 - Two wake up buttons (one is FWUP, the other is TMP0)
 - One extension header
 - One communication connector
 - **Segment LCD display**
 - **Five types of communication interfaces**
 - One USB
 - One RS485
 - One RS232
 - One Infrared Radiation (IR)
 - One Optical Infrared Radiation (OIR)
 - **One EEPROM**

Ordering Information

Ordering Code	Atmel Store Availability ¹	Unit Price (USD) ²	Buy Online
ATM90E2x-DB	0	Varies	Check Distributor

¹Backlog orders can be placed for items currently not available.
²Suggested retail price per unit for budgetary use only.



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