16-bit Modular Student Learning Kit

Featuring the HCS12 “C” family

Excellent beginner’s architecture to teach and learn

Several easy-to-use textbooks based on the HCS12 processor

Common Course Applications

- Motor control
- Sensor monitoring and control systems

Use for courses/projects which:

- Include average memory requirements
- Require a wide array of peripherals
- Are targeted for novice to intermediate level

This application module can be:

- Used Independently
  - Each kit includes required hardware, Freescale CodeWarrior™ Development software, and informational CD
- Connected to the Freescale project board (PBMCUSLK) for:
  - Increased I/O features
  - A more hands-on approach
  - Acceptance of multiple microcontrollers
  - Integrated USB-BDM interface
  - Larger bread-board area

To order, search by part number on www.freesale.com.

Part Number	Description
APS12C128SLK	Independent Application Module (pictured)
PBS12C128SLK	Project Board and Application Module Bundle

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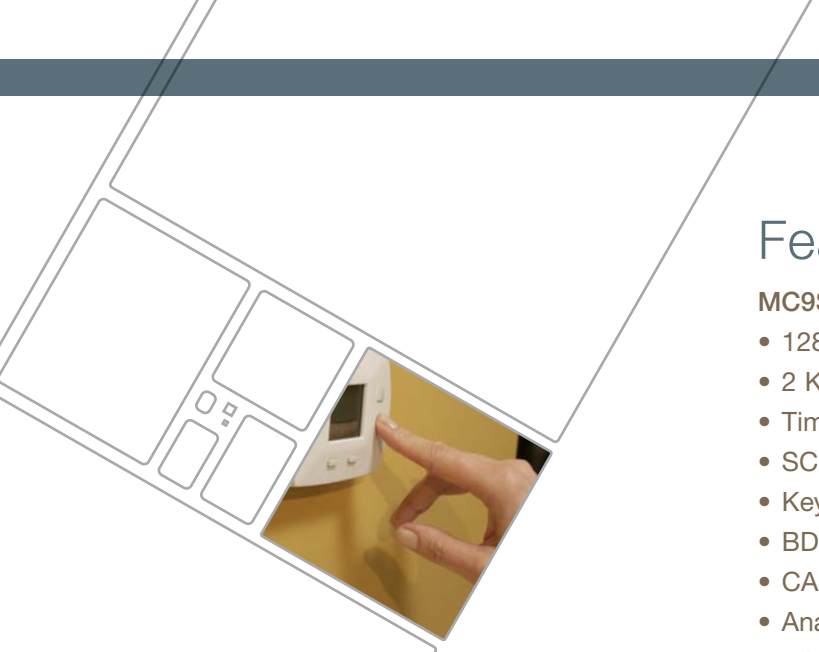
University Programs



Features

MC9S12C128 MCU, 80 QFP

- 128 KB flash EEPROM
- 2 KB RAM
- Timer/PWM
- SCI and SPI communications ports
- Key wake-up port
- BDM debug port
- CAN 2.0 module
- Analog comparator
- 8 MHz internal bus operation default
- 25 MHz bus operation using internal PLL

Integrated USB-BDM

- Allows for debug, programming and epower to board and device

RS-232 transceiver w/ DB9 connector

4 MHz Clock Oscillator

Low Voltage Reset Supervisor

Flexible Power Input Sources

Selectable through Jumpers

- USB cable: 5V DC, 500 mA max
- 5V DC to 12V DC Power Jack: 2.5/5.5 mm barrel connector, center positive
- MCU port connector

User Components Provided

- One 4-pos DIP switch
- Two push button switches
- Four LED indicators

Connectors

- 60-pos pin-header providing access to MCU I/O signals
- 2.0mm barrel connector power input
- 6-pin BDM interface connector
- 3-pos CAN interface connector
- DB9 connector

Specifications

- Module Size: 3.8” x 2.0"
- Power Input: +9V typical, +6V to +20V range
- Supplied with USB cable, manual and resource CD

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REV 0

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