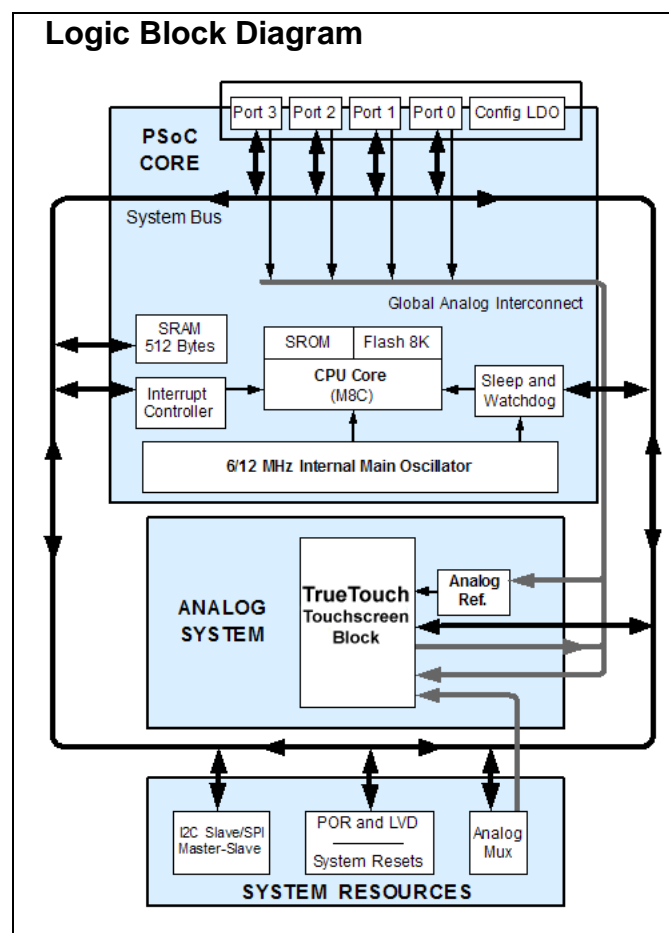


# TrueTouch™ Multi-Touch Gesture Touchscreen Controller

## Features

- TrueTouch™ Capacitive Touchscreen Controller
  - Supports Single-Touch and Multi-Touch Applications
  - Supports up to 25 X/Y Sensor Inputs
  - Supports Screen Sizes 4.7" and Below (Typical)
  - Fast Scan Rates: Typical 300 us per Sensor
  - High Resolution: Typical 320 x 240 for 2.6" Screen
  - I<sup>2</sup>C Slave: 1.8V I<sup>2</sup>C Support
  - Available in Thin 0.6 mm 32-Pin QFN Package
- Lowest Power TrueTouch Touchscreen Device
  - 1.9 mA Average Supply Current at 8 ms Report Rate
  - 1.0 mA Average Supply Current at 16 ms Report Rate
- Includes Gesture Detection Library
- Allows Development of Customized Gestures
- Powerful Harvard Architecture Processor
  - M8C Processor Speeds Running up to 12 MHz
  - Low Power at High Speed
  - 2.4V to 5.25V Operating Voltage
  - Industrial Temperature Range: -40°C to +85°C
- Flexible On-Chip Memory
  - 8K Flash Program Storage, 50000 Erase/Write Cycles
  - 512 Bytes SRAM Data Storage
  - Partial Flash Updates
  - Flexible Protection Modes
  - Interrupt Controller
  - In-System Serial Programming (ISSP)
- Complete Development Tools
  - Free Development Tool (PSoC Designer™)
  - TrueTouch Touchscreen Tuner
  - Full Featured, In-Circuit Emulator and Programmer
  - Full Speed Emulation
  - Complex Breakpoint Structure
  - 128K Trace Memory
- Precision, Programmable Clocking
  - Internal ±5.0% 6 and 12 MHz Main Oscillator
  - Internal Low Speed Oscillator at 32 kHz for Watchdog and Sleep
- Programmable Pin Configurations
  - Pull Up, High Z, Open Drain, and CMOS Drive Modes on All GPIO
  - Configurable Inputs on All GPIO
  - Selectable, Regulated Digital IO on Port 1
  - 3.0V, 20 mA Total Port 1 Source Current
  - 5 mA Strong Drive Mode on Port 1 Versatile Analog Mux
  - Common Internal Analog Bus
  - Simultaneous Connection of IO Combinations

- Additional System Resources
  - Configurable Communication Speeds
    - I<sup>2</sup>C: Selectable to 50 kHz, 100 kHz, or 400 kHz
    - SPI: Configurable between 46.9 kHz and 3 MHz
  - SPI Master and SPI Slave
  - Watchdog and Sleep Timers
  - Internal Voltage Reference
  - Integrated Supervisory Circuit



## Document History Page

Document Title: CY8CTMG100 TrueTouch™ Multi-Touch Gesture Touchscreen Controller				
Document Number: 001-46927				
Revision	ECN	Orig. of Change	Submission Date	Description of Change
**	2518134	DSO/AESA	06/18/08	New data sheet
*A	2523303	DSO/PYRS	06/30/08	Updated supported screen sizes to 4.7" and below

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