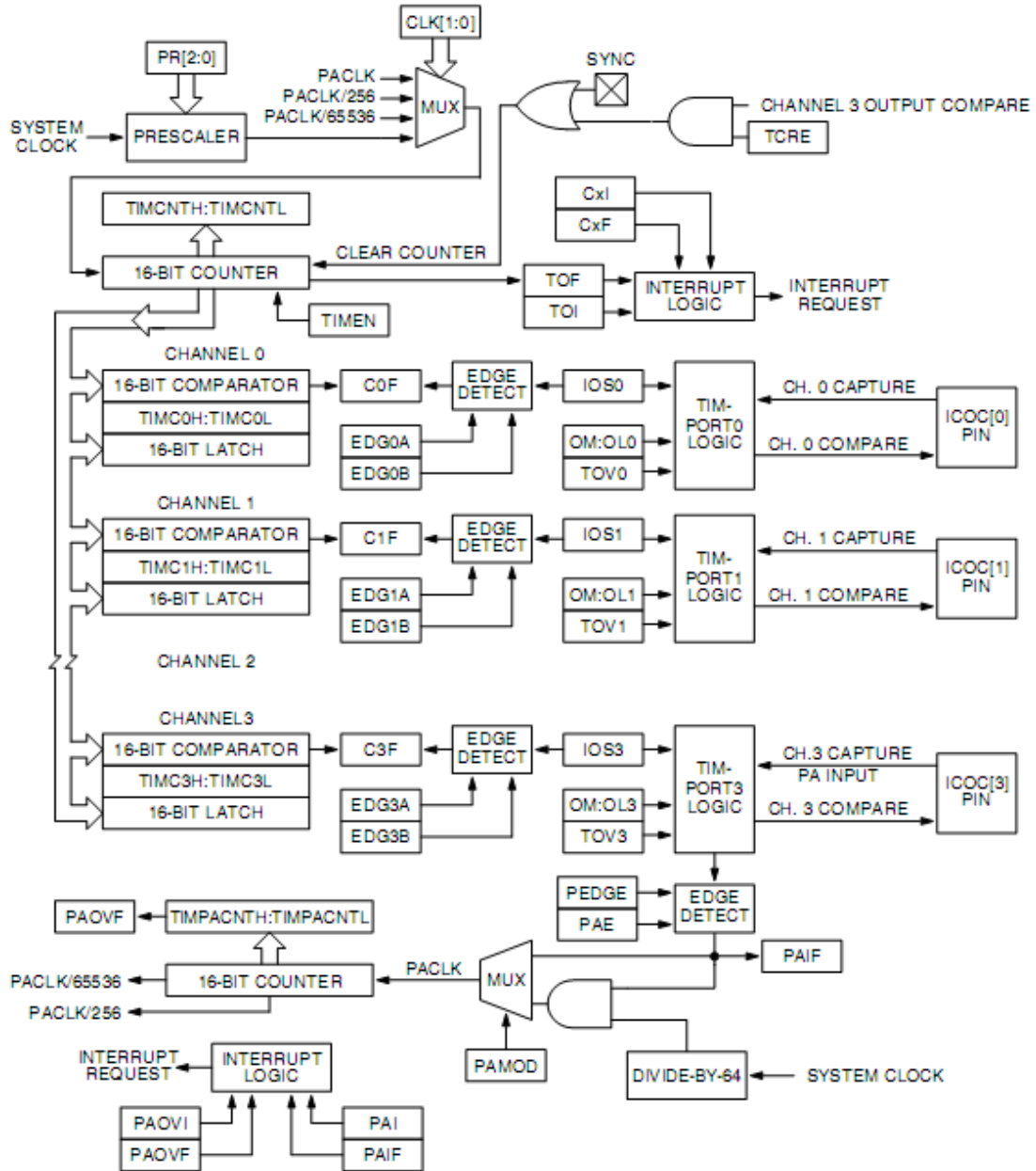**C*Core Technology Co.**

苏州国芯科技有限公司

16B4CTIM
16-Bit 4-Channel Timer Module

Summary

The timer consists of a 16-bit programmable counter driven by a seven-stage programmable prescaler, four input capture/output compare channels, and one pulse accumulator. A timer overflow function allows software to extend the timing capability of the system beyond the 16-bit range of the counter. The input capture and output compare functions allow simultaneous input waveform measurements and output waveform generation. The input capture function can capture the time of a selected transition edge. The output compare function can generate output waveforms and timer software delays. The 16-bit pulse accumulator can operate as a simple event counter or a gated time accumulator. The pulse accumulator shares timer channel 3 when in event mode.

Features

➢ Full-duplex operation
➢ Standard mark/space non-return-to-zero (NRZ) format
➢ 13-bit baud rate selection
➢ Programmable 8-bit or 9-bit data format
➢ Separately enabled transmitter and receiver
➢ Separate receiver and transmitter central processor unit (CPU) interrupt requests
➢ Receiver framing error detection
➢ Hardware parity checking
➢ 1/16 bit-time noise detection
➢ Interrupt-driven operation with eight flags
➢ Two receiver wakeup methods
➢ General-purpose, I/O capability

Timer Block Diagram

To obtain more information about the Time or other C*Core^{TM} products, please contact the C*Core Technology Co., Ltd. by phone: 0512-68091377, email: support@china-core.com or web: http://www.china-core.com.

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