TPU Datasheet

16bit Timer Pulse Unit

Overview
- This IP is on-chip 16-bit timer pulse units (TPU) comprising six-channel 16-bit timers.

Key Features
- Pulse input/output : Maximum 16
- Count clocks : Seven or eight types are provided for each channel.
- Settable operations
    - Waveform output at compare match
    - Input capture function (noise filters can be set)
    - Counter clear operation
    - Simultaneous writing to multiple timer counters (TCNT)
    - Simultaneous clearing by compare match and input capture
    - Synchronous input/output for registers by counter synchronous operation
    - Maximum of 15-phase PWM output by combination with synchronous operation
    - Cascaded operation
- TPU0 and TPU3 : Buffer operation can be set.
- TPU1, TPU2, TPU4, and TPU5 : Phase counting mode can be set.
- Interrupt sources : 26 sources

Block diagram

Renesas Electronics Corporation
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