GPT Datasheet

General Purpose PWM Timer

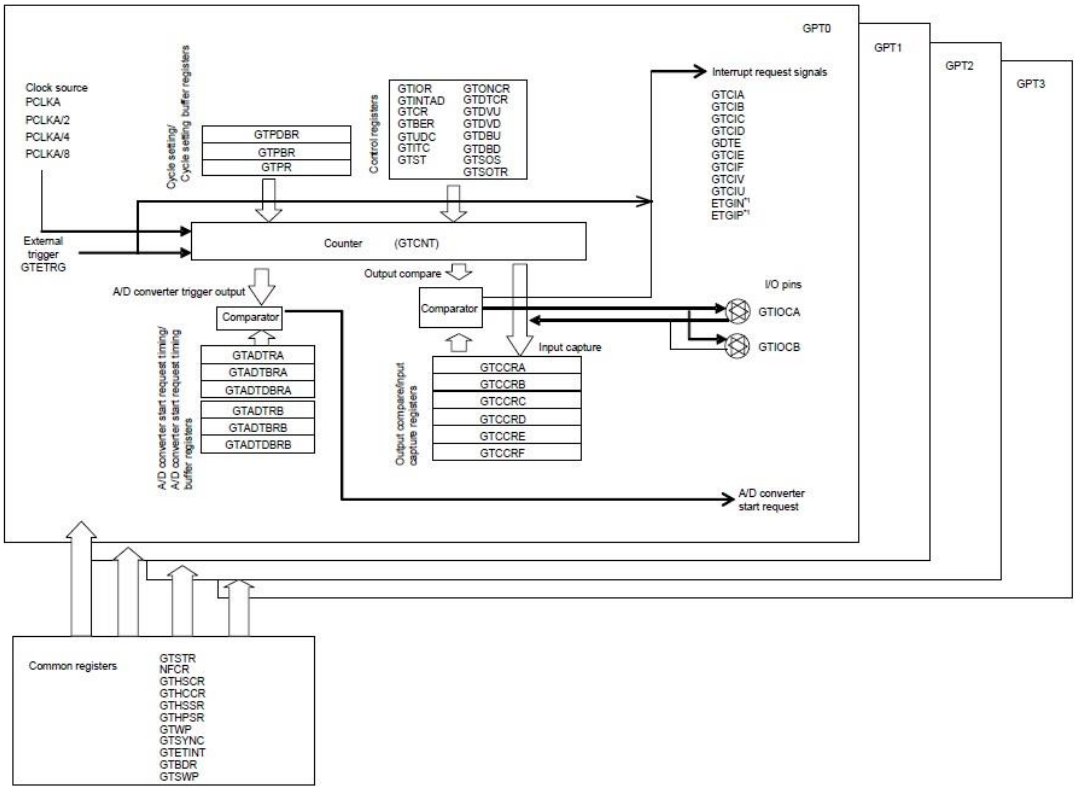
Overview

- This IP is a general PWM timer (GPTA) consisting of a four-channel 16-bit timer.

Key Features

- 16 bits x 4 channels
- Up-counting or down-counting (saw waves) or up/down-counting (triangle waves) for each counter.
- Operating mode
  - Saw-wave PWM mode
  - Saw-wave one-shot pulse mode
  - Triangle-wave PWM mode 1
  - Triangle-wave PWM mode 2
  - Triangle-wave PWM mode 3
- Clock sources independently selectable for each channel
- Two I/O pins per channel
- Noise filter can be set on each input path.
- Two output compare/input capture registers per channel
- For the two output compare/input capture registers of each channel, four registers are provided as buffer registers and are capable of operating as comparison registers when buffering is not in use.

Block diagram



© 2018 Renesas Electronics Corporation. All rights reserved.