

SLG7SV

GreenPAK™ Supervisor IC Standard Designs

Description

[SLG7SV](#) is a collection of the Renesas GreenPAK Supervisor standard designs. Each SLG7SV design is a pre-configured, ready-to-use system supervision solution built on proven GreenPAK mixed-signal ICs, combining programmable logic, timers/counters, analog comparators, voltage references, and GPIOs for power-supply monitoring, reset generation, watchdog supervision, and fast, hardware-based fault response.

These standard designs span compact from a single-rail voltage supervisors up to six rail solutions with undervoltage and overvoltage monitoring, programmable reset delays, watchdog timers, manual reset control, Power-Good generation, and fault-status indication. They cover a wide range of MCU, CPU, FPGA, ASIC, industrial, consumer, and battery-powered system applications.

Every SLG7SV standard design can be further customized to meet specific customer requirements, including the number of monitored rails, voltage thresholds, reset timing, watchdog behavior, input and output polarity, and fault-handling logic, without the cost or lead time of a full custom IC.

Full datasheets for individual standard designs are available upon request. Contact greenpak@renesas.com.

Features

- Pre-configured, ready-to-use GreenPAK supervisor designs
- Integrated undervoltage, overvoltage, and window-voltage detection
- Programmable reset assertion and release delays
- Watchdog timer options for MCU, CPU, FPGA, and SoC supervision
- Manual reset, Power-Good, fault-status, and enable-control options
- Selectable thresholds, timing, hysteresis, and input/output polarity
- Ultra-low standby power and compact package options
- Fully customizable to exact customer supervision requirements
- Single-rail and multi-rail power-supply monitoring
- Current monitoring
- Temperature monitoring
- Ship mode

Applications

- MCU, CPU, FPGA, ASIC, and SoC reset supervision
- Single-rail and multi-rail power-supply monitoring
- Industrial control, automation, and embedded systems
- Battery-powered, portable, and wearable devices
- VR headsets
- Smartphones
- Notebooks
- Solid State drives
- Servers
- Communication, networking, and computing equipment
- Power-Good generation, watchdog monitoring, and fault protection circuits

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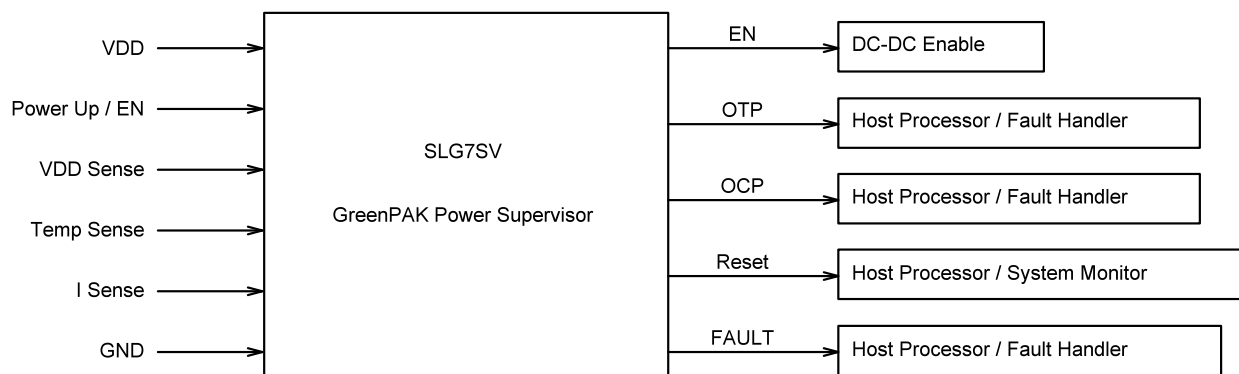


Figure 1. SLG7SV Supervisor IC – Typical Application Block Diagram

The complete, up-to-date list of available standard designs is published in the Product Options section of the SLG7SV product page. Each design is ready for evaluation and can be further customized to meet specific customer requirements. Individual datasheets are available on request via greenpak@renesas.com.