

SIS3807 VME Pulse Generator

SIS GmbH
VME

SIS3807 Short Description

The SIS3807 is a four channel pulser on base of the SIS360x/38xx base board. The duration of the active and inactive level of the output signal can be programmed in 100 ns steps from 100 ns with a depth of 24-bit (i.e. a frequency range from 5/10 MHz down to the Hz domain). Two outputs per channel are available, the individual outputs can be inverted under program control. The possible output level options are NIM, ECL and TTL, the connector type options are LEMO (NIM/TTL) and flat cable connectors (ECL/TTL).

The unit provides a cost effective way to replace up to four NIM dual timer modules with a single (6U one slot) VME card.

SIS3807 Features

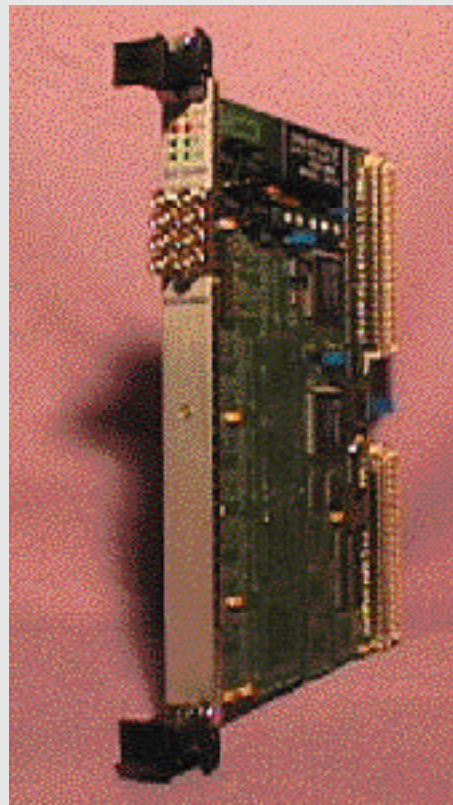
- 4 Channels
- 2 outputs/channel (to be inverted under program control)
- individual 24-bit high/low value
- common factor 8 predivider
- single pulse under VME control
- square wave or pulse mode
- 5/10 MHz maximum frequency
- pulser LEDs
- NIM/TTL/ECL versions
- flat cable (TTL/ECL) and LEMO (TTL/NIM) versions
- Two channel four output/channel version available as firmware option
- Up to eight firmware files

Board Design

Up to six XILINX FPGAs act as the working horses of the SIS3600/380x family. In the case of the SIS3807, which has no frontend XILINX chips, one handles the VME interface a second one is loaded with the actual pulser mechanism. The FPGAs are loaded from a FLASH PROM, which is field upgradable.

Outputs

The pulser outputs are either equipped with a 20 pin header or 8 LEMO connectors. NIM (LEMO), TTL (LEMO or flat cable) and ECL (flat cable are available as output options. In the TTL case the user has the possibility to chose among the high impedance and the 50 Ohm driver options.



SIS3807 LEMO Version

VME Properties

The unit is in compliance with the VME standard, it supports the following VME features:

- A16/24/A32 D16/D32
- Base address settable via 5 rotary switches
- VME access LED (VIPA LED set)
- VME64x connectors
- VME64xP geographical addressing prepared
- VME64xP hot swap prepared

Power Consumption

5V 2,1 A (i.e. P < 11W)

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