

# SOC Dual Channel 300MHz Pin Electronics/DAC/PMU/Deskew

## ISL55162

The ISL55162 is a highly integrated System-on-a-Chip (SOC) pin electronics solution aimed at incorporating every analog function, along with some digital support circuitry, required on a per channel basis for Automated Test Equipment. The interface, control and I/O of the chip are all digital; all analog circuitry is inside the chip. Two complete tester channels are integrated into each chip.

ISL55162 is pin and functionally compatible with Venus, Venus Plus and Venus 2.

## Features

- Pin Electronics Driver/Comparator
  - 3 Level Driver (DVH/DVL/VTT)
  - 8V Driver Output Swings
  - 16V Comparator Input Voltage Range
  - Extremely Low HiZ Leakage over 16V Range
- Per Pin PMU
  - FV, FI, MV, MI
  - 4 Quadrant Operation
  - 8 Current Ranges (32mA, 8mA, 2mA, 512 $\mu$ A, 128 $\mu$ A, 32 $\mu$ A, 8mA, 2 $\mu$ A)
  - +13V Super Voltage Capability
  - FI Voltage Clamps
  - Resistive Load (8 selectable resistor values)

### • Deskew

- Propagation Delay Adjustment
- Falling Edge Adjustment
- Delay Range set by PLL Clock

### • On-Chip DC Levels

- 11 Levels/Channel
- Gain and Offset Correction/Level
- DUT Ground Sensing and Correction

### • 3-Bit Serial CPU Port

- Flexible High Speed Digital Inputs and Outputs
  - Selectable On-Chip Terminations for Inputs
  - 50 $\Omega$  Series Termination for Comparator Outputs

### • Lead Free Package

- 64-Lead, 10mmx10mm TQFP with Top Exposed Heat Slug
- Pdq < 1.1W/Channel

## Applications

- Automated Test Equipment
- Instrumentation
- ASIC Verifiers

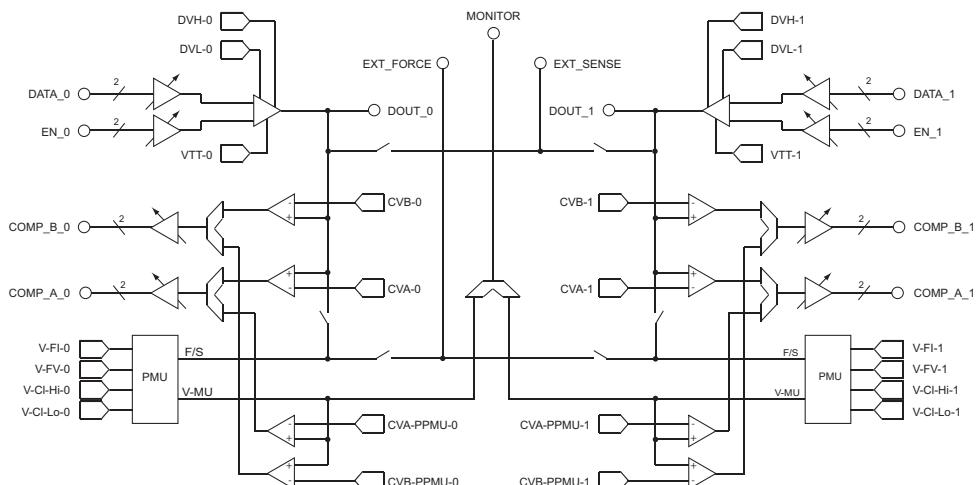


FIGURE 1. BLOCK DIAGRAM

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