

# 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, 512µA, 128µA, 32µA, 8mA, 2µA)
  - +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
  - 50Ω 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

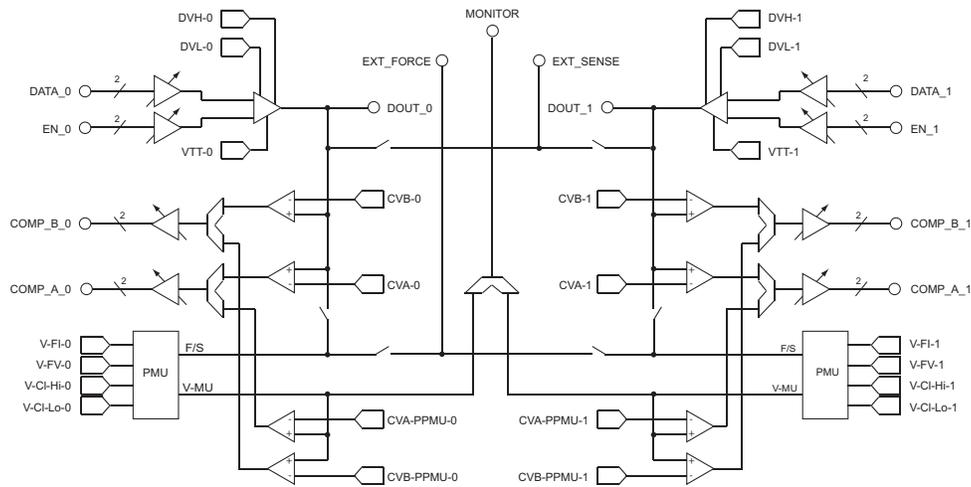


FIGURE 1. BLOCK DIAGRAM

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