

SEQUENCER/SUPERVISOR, #10, TQFP-48, Threshold Voltage:573mV, No. of Supervisors / Monitors:10, Supply Voltage Min:3V, Supply Voltage Max:14.4V, Reset Type:Programmable, Digital IC Case:TQFP

Manufacturers	Analog Devices, Inc
Package/Case	TQFP-48
Product Type	PMIC - Supervisors
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for ADM1062ASUZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADM1062 Super Sequencer® is a configurable supervisory/ sequencing device that offers a single-chip solution for supply monitoring and sequencing in multiple-supply systems. In addition to these functions, the ADM1062 integrates a 12-bit ADC and six 8-bit voltage output DACs. These circuits can be used to implement a closed-loop margining system that enables supply adjustment by altering either the feedback node or the reference of a dc-to-dc converter using the DAC outputs.

Supply margining can be performed with a minimum of external components. The margining loop can be used for in-circuit testing of a board during production (for example, to verify board functionality at -5% of nominal supplies), or it can be used dynamically to accurately control the output voltage of a dc-to-dc converter.

The device also provides up to 10 programmable inputs for monitoring undervoltage faults, overvoltage faults, or out-of-window faults on up to 10 supplies. In addition, 10 programmable outputs can be used as logic enables. Six of these programmable outputs can also provide up to a 12 V output for driving the gate of an N-FET that can be placed in the path of a supply.

Temperature measurement is possible with the ADM1062. The device contains one internal temperature sensor and a differential input for a remote thermal diode. Both are measured by the 12-bit ADC.

The logical core of the device is a sequencing engine. This state-machine-based construction provides up to 63 different states. This design enables very flexible sequencing of the outputs, based on the condition of the inputs.

The ADM1062 is controlled via configuration data that can be programmed into an EEPROM. The entire configuration can be programmed using an intuitive GUI-based software package provided by Analog Devices, Inc.

Features

Complete supervisory and sequencing solution for up to 10 supplies

10 supply fault detectors enable supervision of supplies to- <0.5% accuracy at all voltages at 25°C- <1.0 % accuracy across all voltages and temperatures

5 selectable input attenuators allow supervision of- Supplies up to 14.4 V on VH- Supplies up to 6 V on VP1 to VP4 (VPn)

5 dual-function inputs, VX1 to VX5 (VXn) - High impedance input to supply fault detector with thresholds between 0.573 V and 1.375 V- General-purpose logic input

10 programmable output drivers (PDO1 to PDO10)- Open collector with external pull-up- Push/pull output, driven to VDDCAP or VPn- Open collector with weak pull-up to VDDCAP or VPn- Internally charge-pumped high drive for use with external N-FET (PDO1 to PDO6 only)

Sequencing engine (SE) implements state machine control of PDO outputs - State changes conditional on input events- Enables complex control of boards- Power-up and power-down sequence control- Fault event handling- Interrupt generation on warnings- Watchdog function can be integrated in SE- Program software control of sequencing through SMBus

Complete voltage margining solution for 6 voltage rails

6 voltage output, 8-bit DACs (0.300 V to 1.551 V) allow voltage adjustment via dc-to-dc converter trim/feedback node

12-bit ADC for readback of all supervised voltages

Internal and external temperature sensors

Reference input (REFIN) has 2 input options

Driven directly from 2.048 V ($\pm 0.25\%$) REFOUT pin

Application

Central office systems

Servers/routers

Multivoltage system line cards

DSP/FPGA supply sequencing

In-circuit testing of margined supplies

Related Products



[ADP3336ARMZ-REEL7](#)

Analog Devices, Inc
MSOP-8



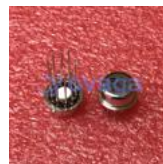
[AD737JRZ](#)

Analog Devices, Inc
SOP-8



[ADP3367ARZ](#)

Analog Devices, Inc
SOIC-8



[AD636JH](#)

Analog Devices, Inc
TO-100-10



[ADP3330ARTZ3.3-RL7](#)

Analog Devices, Inc
SOT-23-6



[ADR434BRZ](#)

Analog Devices, Inc
SOIC-8



[ADR421ARZ](#)

Analog Devices, Inc
SOP-8



[ADR3412ARJZ-R7](#)

Analog Devices, Inc
SOT-23-6