



AHEAD OF WHAT'S POSSIBLE™

# SPACE PRODUCTS ENGINEERING MODEL LIST

*February 2020*

For general information on Analog Devices Space Qualified products please visit the following address.

<http://www.analog.com/aerospace>

For technical inquiries on Aerospace Engineering Models please email us at [aero@analog.com](mailto:aero@analog.com)

For Sales and Distribution contacts please visit the following address.

<http://www.analog.com/en/about-adi/corporate-information/sales-distribution.html>

## COMMITMENT TO THE SPACE MARKET

Analog Devices is committed to serving the needs of the world space community by manufacturing the highest quality data conversion and signal processing products.

Analog Devices' entry into the space level market occurred in August 1990 when it acquired Precision Monolithics Inc. located in Santa Clara, California. Analog Devices' certified facilities have been supplying products for military and space applications since 1972. Analog Devices now offers state-of-the-art, data conversion and linear products to the space market place which were previously only available as commercial or military Class B products.

Analog Devices space level operations located in Greensboro, North Carolina coordinates all space level V (class S) activities, including business development, manufacturing and engineering. The addition of new products is derived from our customers' needs and the ability of these products to meet MIL-PRF-38535 QML level V requirements.

Visit our web site (<http://www.analog.com/aerospace>) or contact our factory for the latest Class S updates as

well as for radiation information on these and other products.

Analog Devices, Inc. Aerospace Product Line standard product is available in one or more of the following processes:

- ▶ MIL-PRF-38535, QML LEVEL V
- ▶ MIL-PRF-38535, QML R (LEVEL V with Radiation Qualification)
- ▶ MIL-PRF-38535, JAN S
- ▶ MIL-PRF-38535, Analog Devices, Inc.'s Aerospace Product Line Standard Product

See <http://www.analog.com/aerospace>. (Standard Space Level Products Program)

The table beginning on page 3 lists the standard product offered by Analog Device's Aerospace Product Line.

Product is also available in accordance with source control drawings. Please call factory for further information.

For further information see contact list on cover page.

## ANALOG DEVICES SPACE LEVEL PRODUCTS

### Manufacturing Locations

Space Level Compliance	Wafer Fab	Assembly	Screening and Quality Conformance Inspection
MIL-PRF-38535 Class V Compliant QMLV Devices	Full Wafer Lot Acceptance: <ul style="list-style-type: none"> <li>• ADI Wilmington MA</li> <li>• ADI Limerick, Ireland</li> <li>• ADI Santa Clara Die Bank</li> </ul>	ADI Phils, Inc. Cavite, Philippines	ADI Phils, Inc. Cavite, Philippines
Standard Space Products (non-QMLV)	SEM Inspection, most models: <ul style="list-style-type: none"> <li>• ADI Wilmington MA</li> <li>• ADI Limerick, Ireland</li> <li>• ADI Santa Clara Die Bank</li> <li>• TSMC Taiwan</li> </ul>	ADI Phils, Inc. Cavite, Philippines	ADI Phils, Inc. Cavite, Philippines
Customer Specific Special Flows	<ul style="list-style-type: none"> <li>• ADI Wilmington MA</li> <li>• ADI Limerick, Ireland</li> <li>• ADI Santa Clara Die Bank</li> <li>• TSMC Taiwan</li> </ul>	ADI Phils, Inc. Cavite, Philippines	ADI Phils, Inc. Cavite, Philippines

**AVAILABLE SPACE PRODUCT ENGINEERING MODELS (EMX)**

EMX devices are engineering models that are form, fit and function over the full temperature range to the flight units. These devices use the same raw material set and are processed on the same Class S certified assemble and test line. Engineering models are processed through 240-Hour burn-in and have no quality conformance inspection.

Generic	Model	Description
AD574S	AD574AUF-EMX	12-Bit ADC w/ Microprocessor Interface
AD667S	AD667D-EMX	12-Bit Microprocessor Compatible DAC
AD667S	AD667F-EMX	12-Bit Microprocessor Compatible DAC
AD768S	AD768AF-EMX	16-Bit 30 MSPS DAC
AD1671S	AD1671F-EMX	12-Bit 1.25 MSPS ADC
AD1672S	AD1672F-EMX	12-Bit 3 MSPS ADC
AD8041S	AD8041SL-EMX	160 MHz Rail-to-Rail Amplifier Eng Model
AD8138S	AD8138AL-EMX	Low Distortion Differential Amplifier Eng Model
AD8182S	AD8182AM-EMX	Dual 2:1 MUX
AD8210S	AD8210AF-EMX	High Voltage Current Shunt Monitor
AD8212S	AD8212AL-EMX	High Voltage Current Shunt Monitor
AD8229S	AD8229AF-EMX	Instrumentation Amplifier
AD8306S	AD8306AF-EMX	400 MHz Log Amp
AD8346S	AD8346AF-EMX	2.5 GHz Modulator
AD8351S	AD8351ARC-EMX	Wide Bandwidth Differential Amp
AD8367S	AD8367AF-EMX	500 MHz VGA
AD8561S	AD8561AL-EMX	7ns Single Comparator
AD8629S	AD8629AL-EMX	Low Offset Precision Amp Eng Model
AD8671S	AD8671AL-EMX	Low Offset, Low Noise Amp - Single
AD8674S	AD8674AM-EMX	Low Offset, Low Noise Amp - Quad Eng Model
AD9042S	AD9042SF-EMX	12-Bit 41 MSPS ADC
AD9042S	AD9042SD-EMX	12-Bit 41 MSPS ADC
AD9246S	AD9246AF-EMX	14-Bit 125 MSPS ADC
AD9254S	AD9254BF-EMX	14-Bit 150 MSPS ADC
AD9283S	AD9283RC-EMX	8-Bit 100 MSPS, 3.3V ADC
ADA4077-2S	ADA4077-2AF-EMX	Low Offset & Drift, High Precision Dual Amplifier
ADA4084-2S	ADA4084-2AF-EMX	Dual Low Noise, R-R I/O, Low Power Amp
ADA4084-4S	ADA4084-4AF-EMX	Quad Low Noise, R-R I/O, Low Power Amp
ADA4096-2S	ADA4096-2AF-EMX	Micro-power R-R Amp
ADA4610-2S	ADA4610-2BF-EMX	Low Input Bias Op-amp
ADCLK925S	ADCLK925AF-EMX	ECL Clock/Data Fan out Buffer
ADF4108S	ADF4108BF-EMX	PLL Frequency Synthesizer
ADH519S	ADH519LSH6-EMX	GaAs PHEMT MMIC Low Noise Amplifier, 18 – 31 GHz
ADL5501S	ADL5501AL-EMX	6 GHz RMS Power Detector
ADL5513S	ADL5513AF-EMX	4 GHz Log Amp
ADL6010S	ADL6010LSH6-EMX	43 GHz Envelope Detector
ADUM141ES	ADUM141E1AF-EMX	Robust Quad ISO, 3:1 ch
ADuM3190S	ADuM3190AF-EMX	High Stability Isolated Error Amp
ADuM7442S	ADuM7442AF-EMX	25 MBPS Quad Channel Digital Isolator
DAC08S	DAC08AF-EMX	8-Bit High Speed Multiplying DAC
DAC08S	DAC08ARC-EMX	8-Bit High Speed Multiplying DAC
OP27S	OP27AL-EMX	Low Noise Precision Op Amp
OP400S	OP400AN-EMX	Quad Low-Offset Low-Power Op Amp
OP467S	OP467AM-EMX	Quad Precision, High Speed Op Amp

OP484S	OP484AM-EMX	Precision Rail to Rail IP/OP Op Amp
REF43S	REF43AL-EMX	+2.5v Reference