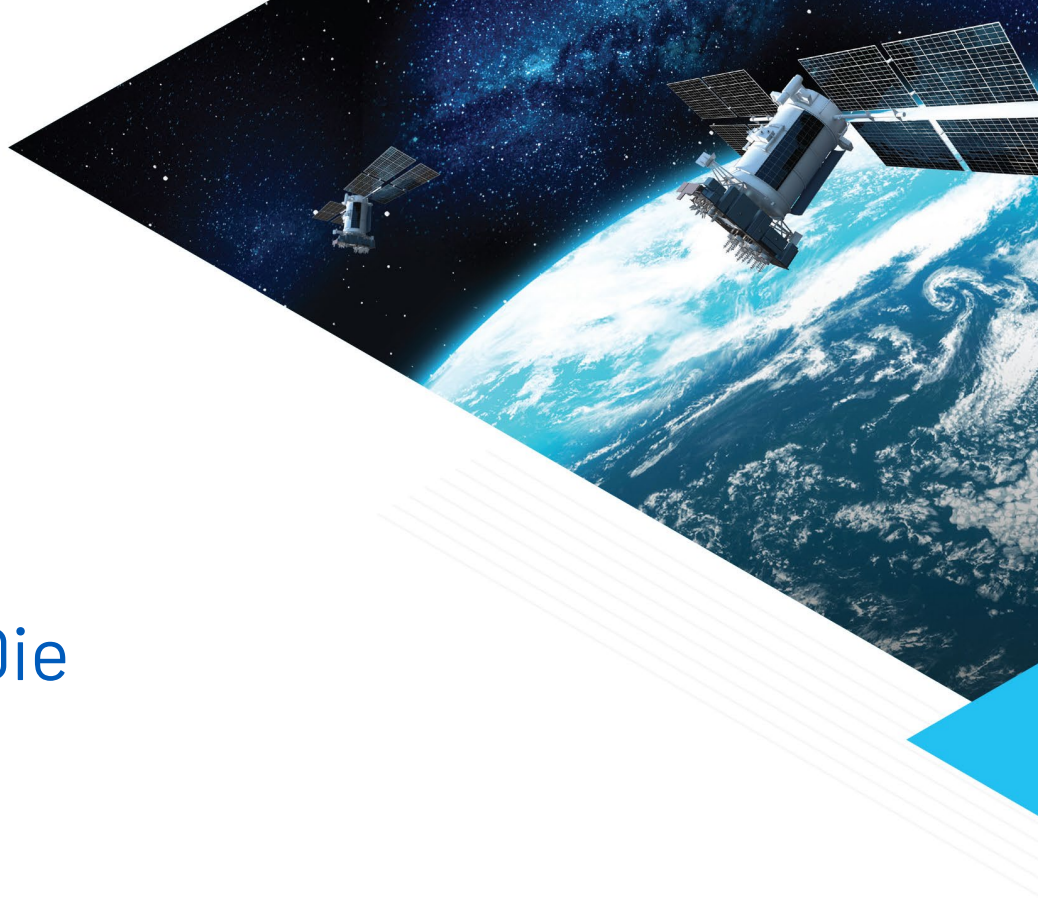




ADI Space Die Products

January 2024

Class K Die Products

In addition to our traditional packaged hermetic space products, ADI also offers space-grade die manufactured in the same wafer fab sites as our packaged parts. These chip devices undergo an Element Evaluation per MIL-PRF-38534, and are fully traceable to the wafer lot or the individual wafer if requested.

There are multiple benefits to purchasing space-qualified die directly from ADI as opposed to up-screening them with third-party vendors:

- ▶ **Fabrication Facility**—ADI's space-qualified die are manufactured in our MIL-PRF-38535 Class V certified wafer fabrication sites.
- ▶ **WLAT**—Each wafer lot undergoes Wafer Lot Acceptance Testing per MIL-STD-883, Test Method 5007.
- ▶ **Traceability**—Each device can be traced back to the wafer lot from which it originated. They can also be traced to the individual wafer if requested.
- ▶ **Die-Specific Datasheets**—All of our space-grade die have their own datasheets separate from the packaged product, including electrical parameter details.

- ▶ **Seamless Technical Support**—Working directly with ADI ensures that you can get the technical support you need, which third-party vendors may have difficulty providing if they are not as intimately familiar with the device.
- ▶ **Radiation Assurance**—Some of our space-qualified die products also include radiation performance guarantees. Group E Subgroup 2 is available with an additional lot charge plus the price of samples at the sample unit price. The standard test plan is per MIL-PRF-38535 with test points at 0 krad, 100 krad, and a 24-hour biased anneal

Available Die and Class K Element Evaluation Products

The table below lists the standard space-qualified die products available from ADI. In exceptional cases, products can also be made available per a customer's Source Control Drawing.

Data Conversion & Clocking

Analog to Digital Converters (ADC)

Product	Model	Function
AD571S	AD5710000C	10-Bit Complete ADC
AD574S	AD574-000C AD574R000C	12-Bit ADC w/ Microprocessor Interface
AD670S	AD670-000C	8-Bit ADC

Digital to Analog Converters (DAC)

Product	Model	Function
AD558S	AD5580006C	DAC
AD561S	AD5610000C	10-Bit Current DAC
AD565S	AD565-000C	12-Bit Current DAC
AD667S	AD667-000C	12-Bit DAC
DAC08S	DAC08R000C DAC080000C	8-Bit High Speed Multiplying DAC

Power Management

Linear Regulators

Product	Model	Function
RH1085	RH1085MKDICE	3A Low Dropout Positive Adjustable Regulator
RH1086M	RH1086BHKDICE RH1086BKDICE	0.5A & 1.5A Low Dropout Positive Adjustable Regulator
RH117	RH117HDICE RH117KDICE	Positive Adjustable Regulator
RH1185	RH1185AMKDICE	Negative Regulator w/ Adjustable Current Limit
RH137	RH137HDICE RH137KDICE	Negative Adjustable Regulator
RH1573K	RH1573KDICE	Low Dropout PNP Regulator Driver
RH1965	RH1965MKDICE	Low Noise, Low Dropout Linear Regulator w/ Shutdown
RH3080MK	RH3080MKDICE	Adjustable 0.9A Single Resistor Low Dropout Regulator
RH3083MK	RH3083MILDICE RH3083MKDICE	Adjustable 2.8A Single Resistor Low Dropout Regulator

Switching Regulators

Product	Model	Function
RH1959	RH1959MILDICE	Step-Down Switching Regulator
RH3480	RH3480MILDICE	LT3480 w/ MIL Screening
RH3845MK	RH3845MKDICE RHK3845MKDICE	Synchronous Current Mode Step-Down Controller

Precision Linear

Comparators

Product	Model	Function
AD790S	AD790-002C	Precision Comparator
AD8561S	AD8561-000C AD8561R000C	Single Supply Comparator
PM111S	PM111-218C	Precision Voltage Comparator
PM139S	PM139R000C PM1390000C PM139-382C PM1390371C	Quad Low-Power Voltage Comparator
RH1011	RH1011DICE	Voltage Comparator
RH1016M	RH1016DICE	UltraFast Precision 10ns Comparator
RH119	RH119DICE	High Performance Dual Comparator

Current Sense Amplifiers

Product	Model	Function
AD8210S	AD8210R000C	Bidirectional Current Shunt Monitor
AD8212S	AD8212R000C	High Voltage Current Shunt Monitor
RH6105	RH6105MILDICE	Micropower Precision, Rail-to-Rail Input Current Sense Amplifier

Discrete Transistors

Product	Model	Function
MAT02S	MAT020000C	Low Noise NPN Transistor

Environmental Sensors

Product	Model	Function
AD590S	AD590-000C AD590R000C	2-Terminal Temperature Transducer

Multipliers

Product	Model	Function
AD534S	AD5340000C	Precision Multiplier
ADH561S	ADH561-000C	Broadband Freq Multiplier
ADH814S	ADH814-000C	Broadband Freq Multiplier

Operational Amplifiers

Product	Model	Function
AD648S	AD648-000C	Low Power BiFET Op Amp
AD8001S	AD8001-000C AD8001R000C	Current Feedback Amplifier
AD8041S	AD8041-000C AD8041R000C	160 MHz Rail-to-Rail Amplifier with Disable
AD8138S	AD8138-000C AD8138R000C	Low distortion, diff ADC driver Amp
AD822S	AD822-000C AD822-011C AD822-013C	Single-Supply, Input Dual Op Amp
AD8629S	AD8629D000C	Low Offset Precision Amp
ADA4062-2S	ADA4062-2-001C	Low Power JFET Input Dual Amp
ADA4077-4S	ADA4077-4R000C	Low Offset & Drift, High Precision Quad Amp
OP07S	OP07R000C OP070000C	Ultra Low Offset Voltage Op Amp
OP11S	OP110000C OP11-269C	Quad Matched 741-Type Op Amp
OP12S	OP120000C	Precision Low Input Current Op Amp
OP15S	OP15R000C	Precision Op Amp
OP200S	OP200-000C	Low Power Op Amp
OP215S	OP215-000C OP215R000C	Dual Precision JFET Input Op Amp
OP270S	OP270R000C OP2700000C	Dual Very Low Noise Precision Op Amp
OP27S	OP27R000C OP270000C	Low Noise Precision Op Amp

Product	Model	Function
OP37S	OP37-207C	Low Noise Precision Op Amp
OP400S	OP400-000C	Qual Low-Offset Low-Power Op Amp
OP42S	OP42-200C OP42-000C	High Speed, Fast Settling Precision JFET-Input
OP467S	OP467-000C OP467R000C	Quad High-Speed Precision Op Amp
OP470S	OP470R000C OP470-000C	Very Low-Noise Quad Op Amp
OP471S	OP471-000C OP471-085C OP471R000C	High Speed Low Noise Quad Op Amp
OP484S	OP484-000C OP484R000C OP4840014C	Precision Rail to Rail IP/OP Op Amp
PM108S	PM108R000C PM1080000C	Low Input Current Op Amp
PM155S	PM1550095C	JFET Input Op Amp
PM156S	PM156-000C PM156R000C	JFET Input Op Amp
RH1013M	RH1013DICE	Dual Precision Op Amp
RH101A	RH101ADICE	Op Amp
RH1028M	RH1028MDICE	Ultralow Noise Precision High Speed Op Amp
RH1078M	RH1078MDICE	Micropower, Dual, Single Supply Precision Op Amp
RH108A	RH108ADICE	Op Amp
RH1128M	RH1128MDICE	Ultralow Noise Precision High Speed Op Amp
RH1498M	RH1498DICE	Dual, Rail-to-Rail IP OP Precision C-Load Op Amp
RH1814M	RH1814DICE	Quad Op Amp
RH27C	RH27CDICE	Precision Op Amp
RH6200M	RH6200MDICE	Low Noise, High Speed Rail-to-Rail Op Amp

Switches & Multiplexers

Product	Model	Function
ADG201S	ADG201-000C	Quad SPST Switch
ADH347S	ADH347-000C	GaAs, SPDT Switch

Voltage References

Product	Model	Function
AD584S	AD584-000C AD584R000C	Pin Programmable Precision Voltage Refer
AD589S	AD589-000C AD589-000EM	Precision 1.2V IC Reference
ADA4084-2S	ADA4084-2L000C ADA4084-2R000C	Pin Programmable Precision Voltage Refer
REF01S	REF01-000C REF01R000C	+10V Precision Voltage Reference
REF02S	REF02R000C REF020000C REF02-448C	+5V Precision Voltage Reference
RH1009	RH1009DICE	Radiation Hardened 2.5V Reference
RH1021-10	RH1021C-10DICE	Radiation Hardened Prec 10V Reference
RH1021-5	RH1021C-5DICE	Precision 5V Reference

Detectors & Logarithmic Amplifiers

Product	Model	Function
AD8317S	AD8317-001C	Log Detector/Controller
ADL6010S	ADL6010R001C ADL6010R000C	43.5 GHz Envelope Detector
RH411	RH411MKDICE	Power NMOS FET
RH5596S	RH5596DICE	RMS Power Detector

Low Noise Amplifiers

Product	Model	Function
AD8330S	AD8330-000C	Voltage Gain Amp
ADH463S	ADH463-000C	Low Noise AGC Amp
ADH8410S	ADH8410-000C	GaAs, Low Noise Amp
AMP01S	AMP01-000C	Low-Noise Precision Amp

RF & Microwave

Attenuators & Switches

Product	Model	Function
ADH939S	ADH939-000C	1.0 dB, Digital Attenuator
ADH941S	ADH941-000C	0.5 dB, Digital Attenuator