



# Space Qualified Parts List

September 2022

## Rich 45+ Year History Serving the Space Market

Our certified facilities have been supplying products for military and space applications since 1972. ADI offers end-to-end state-of-the-art signal chain solutions, including precision linear, data conversion, RF/uW, and power management. ADI's space products have supported missions both close to home and distant

worlds, expanding humanity's understanding of the cosmos and improve life on planet earth.

## ADI Space-Qualified Products

The following tables list all of ADI's space-grade standard products, including **Classic OMLV** products and our new **Commercial Space** products. They are sorted by product category.

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# Commercial Space (Plastic/COTS)

## Data Conversion & Clocking

Product	Orderable Part Number/Description	Package	Note
<b>AD9213S</b>	<b>12 Bit 10.24 GSPS ADC</b> AD9213BBP-10G-CSH	<b>BBP</b> BP-192-1	
<b>AD9361S</b>	<b>RF Agile Transceiver</b> AD9361BBCZ-CSL	<b>BGA</b> BGA-144	1
<b>AD9257S</b>	<b>Octal, 14-Bit, 65 MSPS Serial LVDS 1.8 V ADC</b> AD9257TCPZ-65-CSL	<b>CP</b> CP-64	
<b>AD9914S</b>	<b>3.5 GSPC DDS w/upconverter</b> AD9914BCPZ-CSL AD9914BCPZ-RL7-CSL	<b>CP</b> CP-88-5 CP-88-5	
<b>LTC1604</b>	<b>16-Bit 333 KSPS Sampling ADC</b> LTC1604AIG#90117	<b>G</b> G	2
<b>RT2378-20</b>	<b>20-Bit 1MSPS SAR ADC</b> RT2378IMS-20	<b>MS</b> MS	3

## RS485/RS422 Transceiver

Product	Orderable Part Number/Description	Package	Note
<b>ADLT2852S</b>	<b>3.3V 20Mbps RS485/RS422 Tran</b> ADLT2852MPS-CSL	<b>R</b> R-14	

## Beamforming

Product	Orderable Part Number/Description	Package	Note
<b>ADAR3000S</b>	<b>17-22 GHz Multibeam Beamformer</b> ADAR3000ABCZ-CSL ADAR3000ABCZRL-CSL	<b>BC</b> BC-311 BC-311	
<b>ADAR3001S</b>	<b>27-32 GHz Multibeam Beamformer</b> ADAR3001ABCZ-CSL ADAR3001ABCZRL-CSL	<b>BC</b> BC-311 BC-311	

## Power & Battery Management

Product	Orderable Part Number/Description	Package	Note
<b>RT6804-1</b>	<b>Multicell Battery Monitor</b>	<b>G</b>	
	RT6804HG-1	G	3

### Notes

- <sup>1</sup> This model utilizes tin-silver solder balls
- <sup>2</sup> This product follows a unique screening flow and does not include radiation performance guarantees. Contact ADI for more information on this screening flow
- <sup>3</sup> This product follows the legacy Linear Technology Radiation Tolerant (RT) screening flow that is roughly equivalent to CSH. Contact ADI for more information on this screening flow

# Classic Space (QML Class V and Equivalent)

## Data Conversion & Clocking

### Analog to Digital Converters

Product / Description	Orderable Part Number	Package	Note
<b>AD571S</b>	<b>10-Bit Complete ADC</b>	<b>C, D-18</b>	
AD571SD/QMLV	5962-8680203VVA	D	
Die	AD571-000C	C	
<b>AD574S</b>	<b>12-Bit ADC with Microprocessor Interface</b>	<b>C, D-28, F-28</b>	
AD574AUD/QMLR	5962R8512701VXA	D	
AD574AUF/QMLR	5962R8512701VZA	F	
AD574ATD/QMLR	5962R8512702VXA	D	
AD574ATF/QMLR	5962R8512702VZA	F	
Die	AD574-000C	C	
Die	AD574R000C	C	
<b>AD670S</b>	<b>8-Bit Signal Conditioning Single Supply ADC</b>	<b>C, D-20</b>	
	AD670-703D	D	2
Die	AD670-000C	C	2
<b>AD1671S</b>	<b>12-Bit 1.25 MSPS ADC</b>	<b>D-28, F-28</b>	
	AD1671-703D	D	2

## Analog to Digital Converters

Product / Description	Orderable Part Number	Package	Note
	AD1671-703F	F	2
	AD1671-713F	F	2
<b>AD1672S</b>	<b>12-Bit 3 MSPS ADC</b>	<b>D-28, F-28</b>	
	AD1672-703F	F	
	AD1672-713D	D	
<b>AD9042S</b>	<b>12-Bit 41 MSPS ADC</b>	<b>D-28, F-28</b>	
AD9042SD/QMLR	5962R0253801VXA	D	
AD9042SF/QMLR	5962R0253801VZA	F	
AD9042SF/QMLL	5962L0253802VZA	F	
<b>AD9054S</b>	<b>8-Bit 200MSPS ADC</b>	<b>J44</b>	
	AD9054-703J44	J44	1, 2
<b>AD9246S</b>	<b>14-Bit 125MSPS ADC</b>	<b>F-48</b>	
AD9246AF/QMLR	5962R1422701VXC	F-48	
<b>AD9254S</b>	<b>14-Bit 150 MSPS ADC</b>	<b>F-52</b>	
	AD9254R703F	F	1, 3
<b>AD9283S</b>	<b>8-Bit 100 MSPS 3.3V ADC</b>	<b>RC</b>	
	AD9283-703RC	RC	1, 2
<b>AD9814S</b>	<b>14-Bit, 3-Channel CCD Signal Processor</b>	<b>F-28</b>	
	AD9814-703F	F-28	1, 2

## Clock Generation & Distribution

Product	Orderable Part Number/Description	Package	Note
<b>AD537S</b>	<b>Voltage to Frequency Converter, +/-30V to 150kHz</b>	<b>D-14</b>	
	AD537-703D	D	1, 2
<b>AD652S</b>	<b>Synchronous Voltage to Frequency Conv</b>	<b>Q-16</b>	
AD652SQ/QMLV	5962-9322201VEA	Q-16	
<b>ADCLK925S</b>	<b>ECL Clock/Data Fanout Buffer 7GHz</b>	<b>F-16</b>	
ADCLK925AF/QMLR	5962R1320501VXA	F	
ADCLK925AF/QMLL	5962L1320502VXA	F	
<b>ADF4108S</b>	<b>7 GHz PLL Frequency Synthesizer</b>	<b>F-16</b>	
ADF4108L703F	5962L1420401VXA	F	
ADF4108L803F	5962L1420402VXA	F	
<b>ADH987S</b>	<b>3.3V Low Noise 1:9 Fanout Buffer DC - 4GHz</b>	<b>G32</b>	
	ADH987L701G32	G	

## Digital to Analog Converters

Product	Orderable Part Number/Description	Package	Note
<b>AD561S</b>	<b>10-Bit, Current Output</b>	<b>C, D-16</b>	
	AD561-703D	D	2
Die	AD561-000C	C	2
<b>AD565AS</b>	<b>12-Bit, Current Output, Complete High-Speed DAC</b>	<b>C, D-24</b>	
AD565ASD/QMLV	5962-9689201VJA	D	
AD565ATD/QMLV	5962-9689202VJA	D	
Die	AD565-000C	C	2
<b>AD667S</b>	<b>12-Bit Microprocessor Compatible DAC</b>	<b>C, D-28, F-28</b>	
	AD667-703D	D	2
	AD667-703F	F	2
	AD667-713F	F	2
Die	AD667-000C	C	2
<b>AD768S</b>	<b>16-Bit 30MSPS DAC</b>	<b>F-28</b>	
AD768AF/QMLR	5962R0820102VZA	F-28	
<b>AD9731S</b>	<b>10-Bit 170MSPS DAC</b>	<b>D-28, F-28</b>	
	AD9731-703D	D	1, 2
	AD9731-713D	D	1, 2
	AD9731-703F	F	1, 2
	AD9731-713F	F	1, 2
<b>DAC08S</b>	<b>8-Bit High Speed Multiplying DAC</b>	<b>C, F-16, Q, RC</b>	
DAC08SAQ7/38510	JM38510/11302SEA	Q	
DAC08AF/QMLR	5962R8993202VFA	F	
DAC08AF/QMLL	5962L8993203VFA	F	
DAC08AQ/QMLR	5962R8993202VEA	Q	
DAC08ARC/QMLR	5962R8993202V2A	RC	
DAC08XF/QMLR	5962R8993201VFA	F	
DAC08XQ/QMLR	5962R8993201VEA	Q	
DAC08XRC/QMLR	5962R8993201V2A	RC	
Die	DAC08-000C	C	
Die	DAC08R000C	C	
<b>DAC100S</b>	<b>10-Bit Current Output DAC</b>	<b>Q</b>	
	DAC100-713Q	Q	2

### Notes

- Not available with wafer lot acceptance. Available as MIL-STD 883 Class B Dice plus SEM and Test Method 2010 Condition A Visual only.
- Part Numbers in this column containing "--" may utilize a "-" or "0" in product documentation, shipping, or purchasing documents.

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- <sup>3</sup> Not available with wafer lot acceptance. SEM inspection per MIL-STD-883, Test Method 2018 is not applicable to this product as the wafer fabrication is manufactured using planarized metallization process.
  - <sup>4</sup> DICE in this context is the same form factor as package type C (bare die)

## Power Management

### Linear Regulators

Product	Orderable Part Number/Description	Package	Note
<b>RH117</b>	<b>0.5A &amp; 1.5A Regulator</b>	<b>DICE, H, K</b>	
	RH117H	H	1
	RH117K	K	
Die	RH117DICE	DICE	4
Die	RH117KDICE	DICE	4
<b>RH137</b>	<b>0.5A &amp; 1.5A Negative Regulator</b>	<b>DICE, H, K</b>	
	RH137H	H	1
	RH137K	K	
Die	RH137DICE	DICE	4
Die	RH137KDICE	DICE	4
<b>RH1085</b>	<b>3A LDO Regulator</b>	<b>DICE, K</b>	
	RH1085MK	K	
Die	RH1085MKDICE	DICE	4
<b>RH1086</b>	<b>0.5A &amp; 1.5A LDO Regulator</b>	<b>DICE, H, K</b>	
	RH1086MH	H	1
	RH1086MK	K	
Die	RH1086BHKDICE	DICE	4
Die	RH1086BKDICE	DICE	4
<b>RH1185</b>	<b>3A Negative LDO Regulator</b>	<b>DICE, K</b>	
	RH1185AMK	K	
Die	RH1185AMKDICE	DICE	4
<b>RH1573</b>	<b>LDO PNP Regulator Driver</b>	<b>DICE</b>	
Die	RH1573KDICE	DICE	4
<b>RH1965</b>	<b>0.9A Low Noise, LDO Regulator</b>	<b>DICE</b>	
Die	RH1965MKDICE	DICE	4
<b>RH3080</b>	<b>0.9A Single Resistor LDO Regulator</b>	<b>DICE</b>	
Die	RH3080MKDICE	DICE	4
<b>RH3083</b>	<b>2.8A Single Resistor LDO Regulator</b>	<b>DICE</b>	
Die	RH3083MKDICE	DICE	4

### Switching Regulators

Product	Orderable Part Number/Description	Package	Note
<b>RH1959</b>	<b>4.5A Switching Regulator</b>	<b>DICE</b>	
Die	RH1959MILDICE	DICE	4
<b>RH3845</b>	<b>60Vin Synchronous Switching Controller</b>	<b>DICE</b>	
Die	RH3845MKDICE	DICE	4
<b>RHK3845</b>	<b>60Vin Synchronous Switching Controller Kit</b>	<b>DICE</b>	



### Switching Regulators

Product	Orderable Part Number/Description	Package	Note
	<b>Includes 1x RH3845 &amp; 2x RH411</b>		
Die	RHK3845MKDICE	DICE	4

#### Notes

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- <sup>3</sup> Not available with wafer lot acceptance. SEM inspection per MIL-STD-883, Test Method 2018 is not applicable to this product as the wafer fabrication is manufactured using planarized metallization process.
- <sup>4</sup> DICE in this context is the same form factor as package type C (bare die)

## Precision Linear

### Comparators

Product	Orderable Part Number/Description	Package	Note
<b>AD8561S</b>	<b>7nS Single Comparator</b>	<b>Q-8, L</b>	
AD8561AQ/QMLV	5962-0051501VPA	Q	
AD8561AL/QMLR	5962R0051501VHA	L	
AD8561AQ/QMLR	5962R0051501VPA	Q	
AD8561AL/QMLL	5962L0051502VHA	L	
<b>PM111S</b>	<b>Precision Voltage Comparator</b>	<b>J, Z</b>	
PM111SJ6/38510	JM38510/10304SGA	J	
PM111SZ7/38510	JM38510/10304SPA	Z	
<b>PM139S</b>	<b>Quad Low-Power Voltage Comparator</b>	<b>C, Y, M, RC</b>	
PM139AY/QMLR	5962R8773901VCA	Y	
PM139AM/QMLR	5962R8773901VDA	M	
PM139ARC/QMLR	5962R8773901V2A	RC	
PM139AM/QMLL	5962L8773903VDA	M	
Die	PM139-000C	C	2
Die	PM139R000C	C	
<b>RH119</b>	<b>80nS Dual High Performance Comparator</b>	<b>DICE, H, J, W</b>	
	RH119H	H2	
	RH119J	J2	
	RH119W	W	
Die	RH119DICE	DICE	
<b>RH1011</b>	<b>150nS General Purpose Comparator</b>	<b>DICE, H, J8, W</b>	
	RH1011H	H2	
	RH1011J8	J8	
	RH1011W	W	
Die	RH1011DICE	DICE	
<b>RH1016</b>	<b>10nS Precision Comparator</b>	<b>DICE, W</b>	
	RH1016MW	W	
Die	RH1016DICE	DICE	

### Current Sense Amplifiers

Product / Description	Orderable Part Number	Package	Note
<b>AD8210S</b>	<b>Bidirectional Current Shunt Monitor</b>	<b>F-10</b>	
AD8210AF/QMLR	5962R1223301VXA	F	
AD8210AF/QMLL	5962L1223302VXA	F	
<b>AD8212S</b>	<b>High Voltage Current Shunt Monitor</b>	<b>L</b>	

## Current Sense Amplifiers

Product / Description	Orderable Part Number	Package	Note
AD8212AL/QMLR	5962R0924401VHA	L	
AD8212AL/QMLL	5962L0924402VHA	L	
<b>RH6105</b>	<b>Micropower R-R Current Sense Amp</b>	<b>DICE, F10</b>	
Die	RH6105MILDICE	DICE	4
	RH6105MW	F10	

## Discrete Transistors

Product / Description	Orderable Part Number	Package	Note
<b>MAT02S</b>	<b>Low Noise, Matched Dual NPN Transistor</b>	<b>C, H</b>	
	MAT02-903H	H	2
Die	MAT02-000C	C	2
<b>MAT03S</b>	<b>Low Noise, Matched Dual PNP Transistor</b>	<b>C, L</b>	
	MAT03-903L	L	2
Die	MAT03-000C	C	2
<b>MAT02S</b>	<b>Low Noise, Matched Dual NPN Transistor</b>	<b>C, H</b>	
	MAT02-903H	H	2
Die	MAT02-000C	C	2
<b>MAT03S</b>	<b>Low Noise, Matched Dual PNP Transistor</b>	<b>C, L</b>	
	MAT03-903L	L	2
Die	MAT03-000C	C	2

## Environmental Sensors

Product / Description	Orderable Part Number	Package	Note
<b>AD590S</b>	<b>2 Terminal Temperature Transducer, 1uA/°K</b>	<b>H-3, F-2</b>	
AD590MF/QMLR	5962R8757104VXA	F	
AD590MH/QMLR	5962R8757104VYA	H	
AD590LF/QMLR	5962R8757103VXA	F	
AD590LH/QMLR	5962R8757103VYA	H	
AD590MH/QMLL	5962L8757105VYA	H	

## Instrumentation Amplifiers

Product / Description	Orderable Part Number	Package	Note
<b>AD524S</b>	<b>Instrumentation Amplifier</b>	<b>D-16, E-20</b>	
AD524SD/QMLR	5962R8853901VEA	D	
AD524SE/QMLR	5962R8853901V2A	E	
<b>AD8229S</b>	<b>Low-Noise Instrumentation Amplifier</b>	<b>F-14</b>	
AD8229AF/QMLR	5962R1420501VXA	F	
AD8229AF/QMLL	5962L1420502VXA	F	
<b>AMP01S</b>	<b>Low-Noise Precision Instrumentation Amp</b>	<b>C, N, D-18, TC</b>	
AMP01AD/QMLV	5962-8863001VVA	D	
AMP01ATC/QMLV	5962-8863001V3A	TC	
AMP01D/QMLV	5962-8863003VVA	D	
AMP01N/QMLV	5962-8863003VKA	N	
AMP01TC/QMLV	5962-8863003V3A	TC	
Die	AMP01-000C	C	2
<b>OP227S</b>	<b>Dual Low Noise Low Offset Instrumentation Op Amp</b>	<b>Y, M</b>	
	OP227R903Y	Y	
	OP227R903M	M	

## Isolators

Product / Description	Orderable Part Number	Package	Note
<b>ADuM141ES</b>	<b>150 MBPS Quad-Channel Digital Isolator</b>	<b>F-16</b>	
	ADUM141E1L703F	F	
<b>ADuM3190S</b>	<b>High-Stability Isolated Error Amplifier</b>	<b>F-16</b>	
	ADUM3190P703F	F	
<b>ADuM7442S</b>	<b>25 MBPS Quad Channel Digital Isolator</b>	<b>F-16</b>	
	ADUM7442R703F	F	

## Multipliers

Product / Description	Orderable Part Number	Package	Note
<b>AD534S</b>	<b>Internally Trimmed Precision IC Multiplier</b>	<b>F-16</b>	
AD534TD/QMLV	5962-9053701VCA	F	
Die	AD534-000C	F-16	

## Operational Amplifiers

Product / Description	Orderable Part Number	Package	Note
<b>AD648S</b>	<b>Dual Precision, Low Power BiFET Op Amp</b>	<b>H-8, Q-8</b>	
AD648SH/QMLV	5962-9753501VGA	H	
AD648SQ/QMLV	5962-9753501VPA	Q	
AD648TH/QMLV	5962-9753502VGA	H	
AD648TQ/QMLV	5962-9753502VPA	Q	
<b>AD844S</b>	<b>60 MHz, 2000V/<math>\mu</math>s Op Amp</b>	<b>Q-8</b>	
AD844SQ/QMLR	5962R8964401VPA	Q	
AD844SQ/QMLL	5962L8964402VPA	Q	
<b>AD847S</b>	<b>High Speed, Low Power Op Amp</b>	<b>Q-8</b>	
	AD847-703Q	Q	
<b>AD8001S</b>	<b>800 MHz, 50mW Current Feedback Amplifier</b>	<b>Q-8, L</b>	
AD8001SQ/QMLR	5962R9459301VPA	Q	
AD8001SL/QMLR	5962R9459301VHA	L	
AD8001SL/QMLL	5962L9459302VHA	L	
<b>AD8041S</b>	<b>160 MHz Rail-to-Rail Amplifier with Disable</b>	<b>C, Q-8, L</b>	
AD8041SQ/QMLR	5962R9683902VPA	Q	
AD8041SL/QMLR	5962R9683902VHA	L	
AD8041SL/QMLL	5962L9683903VHA	L	
Die	AD8041-000C	C	
<b>AD8138S</b>	<b>320 MHz Low Distortion Differential Amplifier</b>	<b>L</b>	
AD8138AL/QMLR	5962R0922001VHA	L	
AD8138AL/QMLL	5962L0922002VHA	L	
<b>AD8351S</b>	<b>Low Distortion Fully Differential Amplifier</b>	<b>RC</b>	
AD8351ARC/QMLR	5962R0821801V2A	RC	
AD8351ARC/QMLL	5962L0821802V2A	RC	
<b>AD8629S</b>	<b>Dual Low Offset Precision Amplifier</b>	<b>L</b>	
	AD8629D703L	L	1, 3
<b>AD8671S</b>	<b>Low Noise, Low Input Bias Current, Low Offset</b>	<b>L</b>	
AD8671AL/QMLL	5962L0922301VHA	L	
<b>ADA4077-2S</b>	<b>Dual Low Offset and Drift, High Precision Amp</b>	<b>F-10</b>	
ADA4077-2AF/QMLR	5962R1423301VXA	F	
ADA4077-2AF/QMLL	5962L1423302VXA	F	
<b>ADA4077-4S</b>	<b>Quad Low Offset and Drift, High Precision Amp</b>	<b>C, F-14</b>	
ADA4077-4AF/QMLR	5962R1921501VXA	F	
Die	ADA4077-4R000C	C	
<b>ADA4084-2S</b>	<b>Dual Low Noise, R-R I/O, Low Power Amp</b>	<b>F-10</b>	
ADA4084-2AF/QMLR	5962R1324501VXA	F	
ADA4084-2AF/QMLL	5962L1324502VXA	F	
<b>ADA4084-4S</b>	<b>Quad Low Noise, R-R I/O, Low Power Amp</b>	<b>F-14</b>	
ADA4084-4AF/QMLR	5962R1523601VXA	F	

## Operational Amplifiers

Product / Description	Orderable Part Number	Package	Note
ADA4084-4AF/QMLL	5962L1523602VXA	F	
<b>ADA4096-2S</b>	<b>Dual Micropower Op Amp</b>	<b>F-10</b>	
ADA4096-2AF/QMLR	5962R1420601VXA	F	
<b>ADA4610-2S</b>	<b>Dual Low Input Bias Op Amp</b>	<b>F-10</b>	
ADA4610-2BF/QMLR	5962R1420701VXA	F	
ADA4610-2BF/QMLL	5962L1420702VXA	F	
<b>OP07S</b>	<b>Ultra-Low Offset Voltage Op Amp</b>	<b>C, J, L, Z</b>	
OP07AJ/QMLR	5962R9863901VGA	J	
OP07AL/QMLR	5962R9863901VHA	L	
OP07AZ/QMLR	5962R9863901VPA	Z	
Die	OP07-000C	C	2
Die	OP07R000C	C	
<b>OP11S</b>	<b>Quad Matched 741-Type Op Amp</b>	<b>C, M, Y</b>	
OP11AM/QMLV	5962-8980101VDA	M	
Die	OP11-000C	C	2
<b>OP12S</b>	<b>Precision Low Input Current Op Amp</b>	<b>C</b>	
Die	OP12-000C	C	2
<b>OP15S</b>	<b>Precision JFET-Input Op Amp</b>	<b>J, L, Z</b>	
OP15AJ/QMLR	5962R8954203VGA	J	
OP15AL/QMLR	5962R8954203VHA	L	
OP15AZ/QMLR	5962R8954203VPA	Z	
<b>OP16S</b>	<b>Precision JFET-Input Op Amp</b>	<b>J, Z</b>	
OP16AJ/QMLR	5962R8954304VGA	J	
OP16AZ/QMLR	5962R8954304VPA	Z	
<b>OP27S</b>	<b>Low Noise Precision Op Amp</b>	<b>C, J, L, RC, Z</b>	
OP27SAJ6	JM38510/13503SGA	J	
OP27SAZ7	JM38510/13503SPA	Z	
OP27AJ/QMLR	5962R9468002VGA	J	
OP27AL/QMLR	5962R9468002VHA	L	
OP27ARC/QMLR	5962R9468002V2A	RC	
OP27AZ/QMLR	5962R9468002VPA	Z	
OP27AL/QMLL	5962L9468003VHA	L	
Die	OP27-000C	C	2
Die	OP27R000C	C	
<b>OP37S</b>	<b>Low Noise Precision High-Speed Op Amp</b>	<b>J, Z</b>	
OP37AJ/QMLV	5962-8853701VGA	J	
OP37AZ/QMLV	5962-8853701VPA	Z	
<b>OP42S</b>	<b>High-Speed, Fast Settling Precision JFET-Input</b>	<b>J, Z</b>	
OP42AJ/QMLV	5962-8851301VGA	J	
OP42AZ/QMLV	5962-8851301VPA	Z	

## Operational Amplifiers

Product / Description	Orderable Part Number	Package	Note
<b>OP77S</b>	<b>Ultra-Low Offset Op Amp</b>	<b>J, L, RC, Z</b>	
OP77AJ/QMLV	5962-8773802VGA	J	
OP77AL/QMLV	5962-8773802VHA	L	
OP77ARC/QMLV	5962-8773802V2A	RC	
OP77AZ/QMLV	5962-8773802VPA	Z	
<b>OP200S</b>	<b>Dual Low-Offset, Low Power Op Amp</b>	<b>RC, Z</b>	
OP200ARC/QMLV	5962-8859301V2A	RC	
OP200AZ/QMLV	5962-8859301VPA	Z	
<b>OP215S</b>	<b>Dual Precision JFET Input Op Amp</b>	<b>C, J, RC, Z</b>	
OP215AJ/QMLR	5962R8853801VGA	J	
OP215AZ/QMLR	5962R8853801VPA	Z	
OP215ARC/QMLR	5962R8853804V2A	RC	
Die	OP215-000C	C	2
Die	OP215R000C	C	
<b>OP270S</b>	<b>Dual Very Low Noise Precision Op Amp</b>	<b>C, RC, Z, M</b>	
OP270AZ/QMLV	5962-8872101VPA	Z	
OP270AZ/QMLR	5962R8872101VPA	Z	
OP270AM/QMLR	5962R8872101VDA	M	
OP270ARC/QMLR	5962R8872101V2A	RC	
OP270AM/QMLL	5962L8872103VDA	M	
Die	OP270-000C	C	2
Die	OP270R000C	C	
<b>OP400S</b>	<b>Quad Low-Offset, Low-Power Op Amp</b>	<b>C, N, TC, Y</b>	
OP400AN/QMLV	5962-8777101VKA	N	
OP400ATC/QMLV	5962-8777101V3A	TC	
OP400AY/QMLV	5962-8777101VCA	Y	
OP400AY/QMLR	5962R8777101VCA	Y	
OP400AN/QMLR	5962R8777101VKA	N	
OP400AN/QMLL	5962L8777102VKA	N	
Die	OP400-000C	C	2
<b>OP467S</b>	<b>Quad High-Speed Precision Op Amp</b>	<b>RC, Y, M</b>	
OP467ARC/QMLV	5962-9325801V2A	RC	
OP467AM/QMLR	5962R9325801VDA	M	
OP467AY/QMLR	5962R9325801VCA	Y	

## Operational Amplifiers

Product / Description	Orderable Part Number	Package	Note
<b>OP470S</b>	<b>Very Low-Noise Quad Op Amp</b>	<b>C, N,RC,TC,Y</b>	
OP470ARC/QMLV	5962-8856501V2A	RC	
OP470ARC/QMLR	5962R8856501V2A	RC	
OP470AN/QMLR	5962R8856501VKA	N	
OP470AY/QMLR	5962R8856501VCA	Y	
OP470AY/QMLL	5962L8856503VCA	Y	
	OP470-903TC	TC	2
Die	OP470-000C	C	2
Die	OP470R000C	C	
<b>OP471S</b>	<b>High Speed Low Noise Quad Op Amp</b>	<b>M, N, Y</b>	
OP471AM/QMLR	5962R8856502VDA	M	
OP471AN/QMLR	5962R8856502VKA	N	
OP471AY/QMLR	5962R8856502VCA	Y	
OP471AM/QMLL	5962L8856504VDA	M	
<b>OP484S</b>	<b>Precision, Rail to Rail I/O Op Amp</b>	<b>C, Y, M</b>	
OP484AY/QMLV	5962-0051701VCA	Y	
OP484AM/QMLV	5962-0051701VDA	M	
OP484AY/QMLR	5962R0051701VCA	Y	
OP484AM/QMLR	5962R0051701VDA	M	
OP484AM/QMLL	5962L0051702VDA	M	
Die	OP484-000C	C	2
Die	OP484R000C	C	
<b>PM108S</b>	<b>Low Input Current Op Amp</b>	<b>C, J, L, Z</b>	
PM108SAJ6	JM38510/10104SGA	J	
Die	PM108-000C	C	2
Die	PM108R000C	C	
<b>PM155S</b>	<b>Monolithic JFET Input Op Amp</b>	<b>J, Z</b>	
PM155AJ/QMLR	5962R9863601VGA	J	
PM155AZ/QMLR	5962R9863601VPA	Z	
<b>PM156S</b>	<b>Monolithic JFET Input Op Amp</b>	<b>J, Z</b>	
PM156SAJ6	JM38510/11405SGA	J	
PM156AJ/QMLR	5962R9863602VGA	J	
<b>RH07</b>	<b>Precision Op Amp</b>	<b>DICE, H, W, J8</b>	
	RH07H	H	1
	RH07J8	J8	
	RH07W	W	
Die	RH07DICE	DICE	4



## Operational Amplifiers

Product / Description	Orderable Part Number	Package	Note
<b>RH27</b>	<b>Precision Low Offset Op Amp</b>	<b>DICE, H, J8, W</b>	
	RH27CH	H	1
	RH27CJ8	J8	
	RH27CW	W	
	RH27EW	W	
	RH27EH	H	1
	RH27AEW	W	
Die	RH27CDICE	DICE	4
<b>RH37</b>	<b>Precision High Speed Op Amp</b>	<b>H, J8, W</b>	
	RH37CH	H	1
	RH37CJ8	J8	
	RH37CW	W	
<b>RH101A</b>	<b>Op Amp</b>	<b>DICE, H, W, J8</b>	
	RH101AH	H	1
	RH101AJ8	J8	
	RH101AW	W	
Die	RH101ADICE	DICE	4
<b>RH108A</b>	<b>General Purpose Op Amp</b>	<b>DICE, H, MJ8, W</b>	
	RH108AH	H	1
	RH108AJ8	J8	
	RH108AW	W	
Die	RH108ADICE	DICE	4
<b>RH118</b>	<b>Precision High Speed Op Amp</b>	<b>H, J8, W</b>	
	RH118H	H	1
	RH118J8	J8	
	RH118W	W	
<b>RH1013</b>	<b>Dual Precision Op Amp</b>	<b>DICE, H, W, J8</b>	
	RH1013MH	H	1
	RH1013MJ8	J8	
RH1013MW	5962R8876003VHA	W	
RH1013DICE	5962R8876003V9A	DICE	4
<b>RH1014</b>	<b>Quad Precision Op Amp</b>	<b>J, W</b>	
	RH1014MJ	J	1
RH1014MW	5962R8967703VDA	W	

## Operational Amplifiers

Product / Description	Orderable Part Number	Package	Note
<b>RH1028</b>	<b>Ultralow Noise Precision Op Amp</b>	<b>DICE, W</b>	
	RH1028MW	W	
	RH1028MDICE	DICE	4
<b>RH1056</b>	<b>Precision High-Speed JFET Input Op Amp</b>	<b>DICE, H, W</b>	
	RH1056AMH	H	1
	RH1056AMW	W	
Die	RH1056ADICE	DICE	4
<b>RH1078</b>	<b>Dual Micropower Precision Op Amp</b>	<b>DICE, H, MJ8, W</b>	
	RH1078MH	H	
	RH1078MJ8	J8	
	RH1078MW	W	
Die	RH1078MDICE	DICE	4
<b>RH1128</b>	<b>Ultralow Noise Precision Op Amp</b>	<b>DICE, W</b>	
	RH1128MW	W	
Die	RH1128MDICE	DICE	4
<b>RH1498</b>	<b>Dual R-R Precision C-Load Op Amp</b>	<b>DICE, W</b>	
RH1498MW	5962R1325001VHA	W	
RH1498DICE	5962R1325001V9A	DICE	4
<b>RH1499</b>	<b>Quad R-R Precision C-Load Op Amp</b>	<b>W</b>	
RH1499MW	5962R1325101VDA	W	
<b>RH1814</b>	<b>Quad High Speed, High Slew Rate Op Amp</b>	<b>DICE, W</b>	
	RH1814MW	W	5
Die	RH1814DICE	DICE	4, 5
<b>RH6200</b>	<b>High Speed R-R Low Noise Op Amp</b>	<b>DICE, W</b>	
	RH6200MW	W	
Die	RH6200MDICE	DICE	4

## Sample-and-Hold Amplifiers

Product / Description	Orderable Part Number	Package	Note
<b>AD585S</b>	<b>Hi Speed, Precision Sample-and-Hold Amp</b>	<b>M</b>	
	AD585-703M	M	2
	AD585-713M	M	2
<b>SMP11S</b>	<b>Low Droop Rate/Accurate Sample-and-Hold Amp</b>	<b>Y</b>	
	SMP11-803Y	Y	2

## Switches & Multiplexers

Product / Description	Orderable Part Number	Package	Note
<b>AD8182S</b>	<b>Dual 2:1 Buffered Mux</b>	<b>M</b>	
AD8182AM/QMLR	5962R1021101VDA	M	
AD8182AM/QMLL	5962L1021102VDA	M	
<b>ADG201S</b>	<b>LCMOS Hi-speed QUAD SPST Switches</b>	<b>Q-16</b>	
	ADG201-803Q	Q	1, 2
<b>SW201S</b>	<b>Quad SPST JFET Analog Switch</b>	<b>Q</b>	
	SW201-803Q	Q	2

## Voltage References

Product / Description	Orderable Part Number	Package	Note
<b>AD584S</b>	<b>Pin Programmable Precision Voltage Reference</b>	<b>H-8</b>	
AD584SH/QMLV	5962-3812801VGA	H	
AD584TH/QMLV	5962-3812802VGA	H	
AD584SH/QMLR	5962R3812801VGA	H	
AD584TH/QMLR	5962R3812802VGA	H	
AD584TH/QMLL	5962L3812805VGA	H	
<b>AD589S</b>	<b>Precision 1.2 Volt IC Reference</b>	<b>H-2</b>	
AD589TH/QMLV	5962-8992901VXA	H	
Die	AD589-000C	C	
<b>REF01S</b>	<b>+10V Precision Voltage Reference</b>	<b>J, L, RC, Z</b>	
REF01AJ/QMLR	5962R8958101VGA	J	
REF01AL/QMLR	5962R8958101VHA	L	
REF01ARC/QMLR	5962R8958101V2A	RC	
REF01AL/QMLL	5962L8958105VHA	L	
Die	REF01-000C	C	2
Die	REF01R000C	C	
<b>REF02S</b>	<b>+5V Precision Voltage Reference / Temp. Transducer</b>	<b>C, J, L, RC, Z</b>	
REF02AJ/QMLR	5962R8551401VGA	J	
REF02AL/QMLR	5962R8551401VHA	L	
REF02ARC/QMLR	5962R8551401V2A	RC	
REF02AZ/QMLR	5962R8551401VPA	Z	
REF02AL/QMLL	5962L8551405VHA	L	
Die	REF02-000C	C	2
Die	REF02R000C	C	
<b>REF05S</b>	<b>+5V Precision Voltage Reference</b>	<b>J, L, Z</b>	
REF05AJ/QMLR	5962R0051601VGA	J	
REF05AL/QMLR	5962R0051601VHA	L	
REF05AZ/QMLR	5962R0051601VPA	Z	

## Voltage References

Product / Description	Orderable Part Number	Package	Note
REF05AL/QMLL	5962L0051602VHA	L	
<b>REF10S</b>	<b>+10V Precision Voltage Reference</b>	<b>J, L</b>	
REF10AJ/QMLR	5962R8947901VGA	J1	
REF10AL/QMLR	5962R8947901VHA	L	
REF10AL/QMLL	5962L8947903VHA	L	
<b>REF43S</b>	<b>+2.5V Low-Power Precision Voltage Ref</b>	<b>J, L, RC, Z</b>	
REF43AZ/QMLR	5962R9060302VPA	Z	
REF43AL/QMLR	5962R9060303VHA	L	
REF43AL/QMLL	5962L9060304VHA	L	
	REF43-803J	J	2
	REF43-803L	L	2
	REF43-803RC	RC	2
	REF43-803Z	Z	2
	REF43R803J	J	
	REF43R803RC	RC	
<b>RH129A</b>	<b>+6.9V Voltage Reference</b>	<b>H</b>	
	RH129AH	H	1
<b>RH1009</b>	<b>+2.5V Precision Voltage Reference</b>	<b>H, W, DICE</b>	
RH1009MH	5962R8961002VXC	H	1
RH1009MW	5962R8961002VHA	W	
RH1009DICE	5962R8961002V9A	DICE	4
<b>RH1021</b>	<b>+5V, +7V, +10V Precision Voltage Reference</b>	<b>H, W, DICE</b>	
RH1021BMH-5	5962R8876201VGA	H	1
RH1021CMH-5	5962R8876202VGA	H	1
	RH1021DMH-5	H	1
RH1021CMW-5	5962R8876202VHA	W	
RH1021C-5 DICE	5962R8876202V9A	DICE	4
	RH1021BMH-7	H	1
	RH1021DMH-7	H	1
RH1021BMH-10	5962R8860001VGA	H	1
RH1021CMH-10	5962R8860002VGA	H	1
	RH1021DMH-10	H	1
RH1021CMW-10	5962R8860002VHA	W	
RH1021C-10 DICE	5962R8860002V9A	DICE	4
RH1021DMH-10	5962R8860003VGA	H	1
<b>RH1034-1.2</b>	<b>+1.2V Voltage Reference (+7V Aux)</b>	<b>H, W</b>	
	RH1034MW-1.2	W	
	RH1034MH-1.2	H	1

### Notes

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  - <sup>2</sup> Part Numbers in this column containing “-” may utilize a “-” or “0” in product documentation, shipping, or purchasing documents.
  - <sup>3</sup> Not available with wafer lot acceptance. SEM inspection per MIL-STD-883, Test Method 2018 is not applicable to this product as the wafer fabrication is manufactured using planarized metallization process.
  - <sup>4</sup> DICE in this context is the same form factor as package type C (bare die)
  - <sup>5</sup> The RH1814MDICE is a dual op amp. There are two die per RH1814MW packaged part.

## RF & Microwave

### Attenuators & Switches

Product / Description	Orderable Part Number	Package	Note
<b>ADH232S</b>	<b>DC - 15 GHz High-Isolation Non-Reflective SPDT Switch</b>	<b>C</b>	
Die	HMC8800	C	
<b>ADH244S</b>	<b>DC - 4 GHz SP4T Non-Reflective Switch</b>	<b>G16</b>	
	ADH244-701G16	G16	
<b>ADH346S</b>	<b>DC - 20GHz, Voltage Variable Attenuator</b>	<b>C, G8</b>	
Die	HMC8801	C	
	ADH346-701G8	G	
<b>ADH347S</b>	<b>DC-20GHz Non-Reflect SPDT Switch</b>	<b>C, LH5</b>	
Die	ADH347-000C	C	
	ADH347-701LH5	LH5	
<b>ADH424S</b>	<b>DC - 13GHz, 0.5dB LSB 6-Bit Digital Attenuator</b>	<b>C, LH5, G16</b>	
Die	HMC8802	C	
	ADH424-701LH5	LH5	
	ADH424-701G16	G16	
<b>ADH939S</b>	<b>0.1 - 40 GHz Digital Step Attenuator</b>	<b>C</b>	
Die	ADH939-000C	C	
<b>ADH941S</b>	<b>0.1 - 30 GHz Digital Step Attenuator</b>	<b>C</b>	
Die	ADH941-000C	C	

### Detectors & Logarithmic Amplifiers

Product / Description	Orderable Part Number	Package	Note
<b>AD8306S</b>	<b>400 MHz Demodulating Logarithmic Amplifier</b>	<b>F-16</b>	
AD8306AF/QMLR	5962R9864602VXA	F	
AD8306AF/QMLL	5962L9864603VXA	F	
<b>ADL5501S</b>	<b>Tru Pwr RMS Detector 50MHz - 6GHz</b>	<b>L</b>	
ADL5501AL/QMLR	5962R1123901VHA	L	
ADL5501AL/QMLL	5962L1123902VHA	L	
<b>ADL5513S</b>	<b>4 GHz Logarithmic Amplifier</b>	<b>F-16</b>	
ADL5513AF/QMLR	5962R1120301VXA	F	
<b>ADL6010S</b>	<b>Fast Responding, 45 dB Range, 0.5 GHz to 43.5 GHz Envelope Detector</b>	<b>C, LSH6</b>	
	ADL6010R703LSH6	LSH6	
Die	ADL6010R000C	C	
<b>RH5596S</b>	<b>100MHz to 40GHz Linear-in-dB RMS Power Detector</b>	<b>DICE</b>	
Die	RH5596DICE	DICE	4

## Gain Block Amplifiers

Product / Description	Orderable Part Number	Package	Note
<b>ADH395S</b>	<b>InGaP HBT Gain Block Amplifier, DC – 4 GHz</b>	<b>G8</b>	
	ADH395-701G8	G	

## Low Noise Amplifiers

Product / Description	Orderable Part Number	Package	Note
<b>ADH519S</b>	<b>GaAs PHEMT MMIC LNA, 18 – 31 GHz</b>	<b>LSH6</b>	
	ADH519R701LSH6	LSH6	
<b>ADH8410S</b>	<b>0.01 GHz to 10 GHz, GaAs, pHEMT, MMIC, LNA</b>	<b>LH5, C</b>	
	ADH8410-701LH5	LH5	
Die	ADH8410-000C	C	

## Mixers

Product / Description	Orderable Part Number	Package	Note
<b>ADH141S</b>	<b>6 – 18GHz, Double-Balanced Mixer; RF &amp; LO=6-18GHz, IF=DC-6GHz</b>	<b>C</b>	
Die	HMC8804	C	
<b>ADH554S</b>	<b>GaAs Fundamental Mixer, 11 GHz – 18 GHz</b>	<b>LH5</b>	
	ADH554-701LH5	LH5	
<b>ADH1015S</b>	<b>26 GHz – 32 GHz Triple Balanced Mixer; RF = 26 GHz – 32 GHz, LO = 7 GHz – 11 GHz, IF = 16 GHz – 22 GHz</b>	<b>C</b>	
Die	HMC8805	C	

## PLLs, VCOs, and Modulators

Product / Description	Orderable Part Number	Package	Note
<b>AD8346S</b>	<b>2.5 GHz Modulator</b>	<b>F-16</b>	
AD8346AF/QMLR	5962R0922701VXA	F	
AD8346AF/QMLL	5962L0922702VXA	F	
<b>ADF4108S</b>	<b>7 GHz PLL Frequency Synthesizer</b>	<b>F-16</b>	
ADF4108L703F	5962L1420401VXA	F	
ADF4108L803F	5962L1420402VXA	F	

## Power Amplifiers

Product / Description	Orderable Part Number	Package	Note
<b>ADH451S</b>	<b>GaAs PHEMT Medium Power Amplifier</b>	<b>LH5</b>	
	ADH451-701LH5	LH5	

## Prescalers & Frequency Multipliers/Dividers

Product / Description	Orderable Part Number	Package	Note
<b>ADH361S</b>	<b>DC - 13 GHz Divide-by-2</b>	<b>G8</b>	
	ADH361R701G8	G	
<b>ADH363S</b>	<b>DC - 12 GHz Divide-by-8</b>	<b>G8</b>	
	ADH363R701G8	G	
<b>ADH365S</b>	<b>DC to 13 GHz Divide-By-4</b>	<b>G8</b>	
	ADH365R701G8	G8	

## Variable Gain Amplifiers

Product / Description	Orderable Part Number	Package	Note
<b>AD8367S</b>	<b>500 MHz Variable Gain Amplifier</b>	<b>F-16</b>	
	AD8367R703F	F	
	AD8367L703F	F	

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- DICE in this context is the same form factor as package type C (bare die)