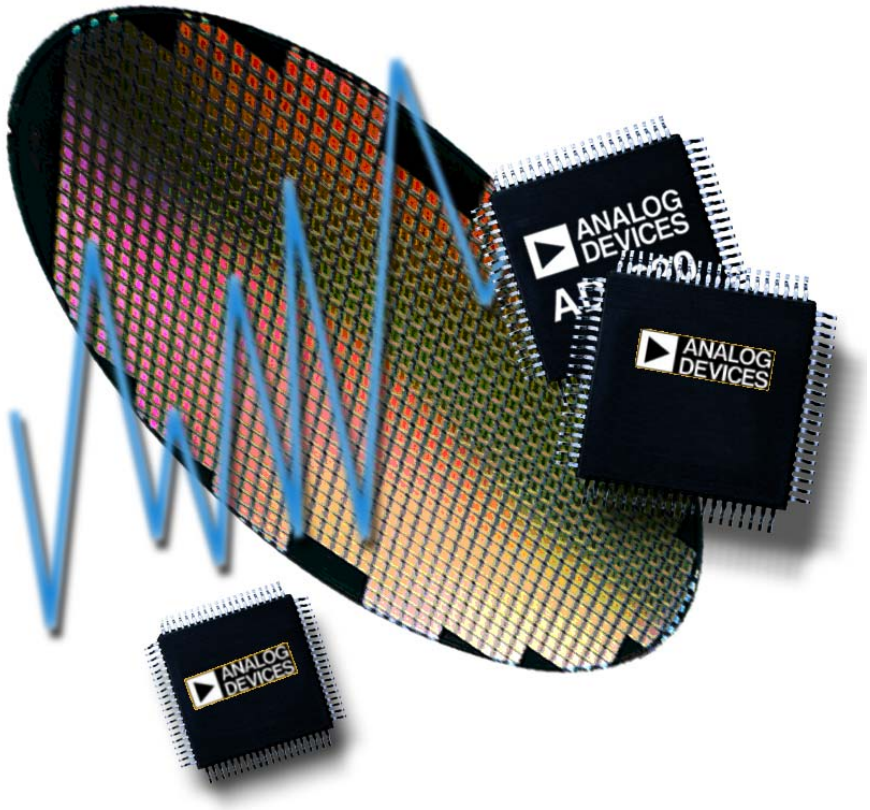

Reliability Report

Report Title: ADLK 0.6um 6inch to 8inch transfer

Report Number: 6396

Date: 29 June 2008

Analog Devices Reliability . Gateway Business Park, Special Economic Park, Javelera, Gen. Trias . Cavite, Philippines
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Summary

This report documents the successful completion of the engineering evaluation on the YG06 AD5398 product in a 8-LFCSP package, the YH14 which is sold as bare die, the X402 , the ADP1653 in a 16l LFCSP, the ADP3207 in a 40L LFCSP, the ADP1823 in a 32L LFCSP, the ADD8754 in a 24L LFCSP, ADP3207A in a 40L LFCSP, the ADP3208 product in a 48-LFCSP, the ADP3209 product in a 32-LFCSP and the AD5821 which is also sold in bare die.

Other generics to be covered by this qualification report are the: ADE7754, AD7843, AD7477, AD7476, AD7418, AD7417, AD7416, AD5300, ADG758, AD5206, AD7303, ADW50009, AD11/2045, AD7730L, AD9832, AD9835, AD5306, AD5316, AD5326, AD5307, AD5317, AD5327, AD8509, AD8511, AD5241-10, AD5241-100, AD5241-1, AD5242-10, AD5242-100, AD5242-1, AD7302, AD7801, AD73360, AD7730, AD7731, AD5302, AD7418 CHIPS, AD5312, AD5322, AD5313, AD5323, AD5308, AD5328, AD5318, AD7904, AD7914, AD7923, AD7918, AD7924, AD7928, AD7927, AD8607, AD8603, MCPCHIPS, AD7908, ADG714, ADG725, ADG731, ADG732, ADG726, AD7478, AD5160, AD5161, AD5245, ADP3041, AD9851, AD7911/12/21/22, AD8604, AD5162-2.5, AD5162-100, AD5162-10, AD5172/AD5243-10, AD5162-50, AD5172/AD5243-100, AD5172/AD5243-50, AD5172/AD5243-2.5, AD5248-10, AD5170-10, AD5248-2.5, AD5248-100, AD7873, AD7656, AD5170-2.5, AD7922, AD5173-2.5, AD5173-50, AD5173-10, AD5173-100, AD5248-50, AD7829, AD5170-50, AD7822, AD7825, AD7829-1, AD5170-100, AD5301, AD5311, AD5321, ADM1175/6/7/8/91/92 AD7873, AD7545A MIL, AD7545ACHIPS, AD7545A, AD7545, PM7545, AD5333, AD5332, AD5331, AD5330, AD5343, AD5341, AD5335, AD5344, AD5342, AD5336, AD5334, AD5340, ADG787, DAC8412, AD8602, AD8511, AD8509, AD7303, AD5626, ADG706, AD7740, DAC8413, AD5227-10, AD5227-100, ADG819, AD5725, AD5228-10, AD5228-100, AD5228-50, AD5725-1, AD7490, AD7888, AD7888CHIPS, AD5227-50, AD5373, DAC8412, AD5725-1, AD5725, AD5371, AD5370, AD5372, AD5361, AD5362, AD5363, ADP1864, AD5360, ADG707, AD7657, AD7476A, ADG728, ADG739, AD5320, AD7814, ADG801, ADG802, AD7814CHIPS, DAC8420, AD5726, AD7888MCPCHIPS, DAC8043A, DAC8043, AD5441, ADG3300, ADG3308, ADG3304, AD7414-0/-1/AD7415, AD7414-2/-3, AD8668, ADG715, ADG884, ADM1170-1, ADM1170-2, ADM1171-1, ADM1171-2, ADM1172-1, ADM1172-2, ADM4210-1, ADM4210-2, ADM6819, ADM6820, ADP1821, ADP1822, AD5405, ADG3304 WLCSP, AD5415, AD7992/3/4/7/8, ADM1170-1/-2, ADM1171-1/-2, ADM1172-1/-2, ADM4210-1/-2, ADM6819, ADM6820, ADG1434, ADG1408, ADG1409, ADG1433, ADG1434, ADM4073F, ADM4073T, ADM4073H, AD8619, ADG888 BUMPED, AD8231, ADG794, ADG888, AD5443, AD5424, AD5425, AD5426, AD5432, AD5433, AD5445, ADR5040/1/3/4/5, AD7817, AD5628, AD5648, AD5666, AD5668, AD5678, and the ADG1208. These are listed in the additional transferred parts section.

The AD5398 is a single 10-bit DAC with 120mA output current sink capability.

The AD5821 is a single 10-bit digital-to-analog converter with 120mA output current sink capability. It features and internal reference and operates from a single 2.7V to 5.5V supply. The DAC is controlled via a 2-wire (I^2C-compatible) serial interface that operates at clock rates up to 400kHz.

The X402 is a thin film test chip. The X402 test vehicle was used to qualify the seven 'black box' circuit options. These circuit options ranged from single latch to 16k memory arrays. All qualification material was assembled in a 44 ld PLCC package.

The ADP1653 is an ultra compact flash LED driver.

The ADP3207 is a multi-phase synchronous buck switching controller optimized for converting the notebook battery voltage into the core supply voltage required by Intel processor.

The ADP3207A is a further revision on the ADP3207.

The ADD8754 offers display designers the flexibility of a high frequency step-up dc-dc switching regulator, LDO voltage regulator, dedicated VCOM operational amplifier, and a gate pulse modulator circuit integrated on a single chip.

The ADD8754D is a follow on part from the ADD8754 with improved ESD protection.

The ADP1823 is a versatile dual, interleaved synchronous PWM buck controller.

The ADP3208 is a two phase integrated controller and driver chip. The controller portion is derived from the ADP3207, a three phase controller. The driver portion is a scaled up version of the drivers on the ADP3280, which is also an integrated driver and controller.

The ADP3209 is a single-phase controller with drivers for mobile chip-sets.

All parts already have been fully qualified to ADI0012 on 6" in the Limerick Fab. This report covers the qualification of the same die on Limericks 8" 0.6um DPTM CMOS fab process.

Table 1: AD5398 Product Characteristics

Device	
Maximum Power Dissipation (W)	0.184
Device / Die ID	F23A
Die Size (mm)	1.40 x 1.69
Wafer Fabrication Site	ADI-Limerick 8”
Wafer Fabrication Process	0.6um DPTM CMOS
Transistor Count	7 thousand
Passivation Layer	undoped-oxide/SiN
Bond Pad Metal Composition	AlCu
Maximum Current Density (mA/µm)	1.18
Package/Assembly	
Available Package(s)	8-LFCSP
Body Size (mm)	3.00 x 3.00 x .00
Assembly Location	Amkor-K
Die Attach	Ablestik 8290
Lead Frame Material	Copper Olin 194
Bond Wire Type	Gold
Bond Wire Dia. (mils)	1.00
Mold Compound	Sumitomo G700
Lead Finish	Tin Plate
Moisture Sensitivity Level	1
Maximum Peak Reflow (°C)	260

Table 2: AD5821 Product Characteristics

Device	
Maximum Power Dissipation (W)	0.184
Device / Die ID	F24A
Die Size (mm)	1.52 x 1.69
Wafer Fabrication Site	ADI-Limerick 8”
Wafer Fabrication Process	C6DPTMRA
Transistor Count	5 thousand
Passivation Layer	undoped-oxide/SiN
Bond Pad Metal Composition	AlCu
Maximum Current Density (mA/µm)	1.18

Table 3: ADP3207 Product Characteristics

Device	
Maximum Power Dissipation (W)	0.100
Device / Die ID	6510Z
Die Size (mm)	2.02 x 2.00
Wafer Fabrication Site	ADI-Limerick 8”
Wafer Fabrication Process	H6DPDMPNLR
Transistor Count	7300
Passivation Layer	undoped-oxide/SiN
Bond Pad Metal Composition	AlCu
Maximum Current Density (mA/µm)	1.18
Package/Assembly	
Available Package(s)	40-LFCSP
Body Size (mm)	6.00 x 6.00 x .9
Assembly Location	Amkor-K
Die Attach	Ablestik 8290
Lead Frame Material	Copper
Bond Wire Type	Gold
Bond Wire Dia. (mils)	1.00
Mold Compound	Sumitomo G700
Lead Finish	Tin Plate
Moisture Sensitivity Level	3
Maximum Peak Reflow (°C)	260

Table 4: ADD8754 Product Characteristics

Device	
Maximum Power Dissipation (W)	2.08
Device / Die ID	ADD8754 - 8524Z
Die Size (mm)	2.24 x 2.24
Wafer Fabrication Site	ADI-Limerick 8”
Wafer Fabrication Process	0.6um DPTM CMOS
Transistor Count	1240
Passivation Layer	undoped-oxide/OxyNitride
Bond Pad Metal Composition	AlCu
Package/Assembly	
Available Package(s)	4x4 24-LFCSP
Body Size (mm)	4.00 x 4.00 x .85
Assembly Location	Amkor-K
Die Attach	Ablestik 8900NC
Lead Frame Material	Copper Olin 194
Bond Wire Type	Gold
Bond Wire Dia. (mils)	1.20
Mold Compound	Sumitomo G700
Lead Finish	Tin Plate
Moisture Sensitivity Level	3
Maximum Peak Reflow (°C)	260

Table 5: ADD8754D Product Characteristics

Device	
Maximum Power Dissipation (W)	2.08
Device / Die ID	YJ22B01
Die Size (mm)	1.72 x 1.8
Wafer Fabrication Site	ADI-Limerick 8”
Wafer Fabrication Process	0.6um DPTM CMOS
Transistor Count	1240
Passivation Layer	undoped-oxide/OxyNitride
Bond Pad Metal Composition	AlCu
Package/Assembly	
Available Package(s)	4x4 24-LFCSP
Body Size (mm)	4.00 x 4.00 x .85
Assembly Location	Amkor-K
Die Attach	Ablestik 8900NC
Lead Frame Material	Copper Olin 194
Bond Wire Type	Gold
Bond Wire Dia. (mils)	1.20
Mold Compound	Sumitomo G700
Lead Finish	Tin Plate
Moisture Sensitivity Level	3
Maximum Peak Reflow (°C)	260

Table 6: ADP3207A Product Characteristics

Device	
Maximum Power Dissipation (W)	0.100
Device / Die ID	6572ZB
Die Size (mm)	2.23 x 2.20
Wafer Fabrication Site	ADI-Limerick 8”
Wafer Fabrication Process	H6DPDMPNLR
Transistor Count	7300
Passivation Layer	undoped-oxide/SiN
Bond Pad Metal Composition	AlCu
Maximum Current Density (mA/µm)	1.18
Package/Assembly	
Available Package(s)	40-LFCSP
Body Size (mm)	6.00 x 6.00 x .9
Assembly Location	Amkor-K
Die Attach	Ablestik 8290
Lead Frame Material	Copper
Bond Wire Type	Gold
Bond Wire Dia. (mils)	1.00
Mold Compound	Sumitomo G700
Lead Finish	Tin Plate
Moisture Sensitivity Level	3
Maximum Peak Reflow (°C)	260

Table 7: X402 Product Characteristics

Device	**X402**
Maximum Power Dissipation (W)	0.050
Device / Die ID	A
Die Size (mm)	2.61 x 2.61
Wafer Fabrication Site	ADI-Limerick
Wafer Fabrication Process	C6 DPTMR
Passivation Layer	undoped-oxide/SiN
Bond Pad Metal Composition	AlCu
Package/Assembly	
Available Package(s)	44-PLCC
Body Size (mm)	.00 x .00 x .00
Assembly Location	Amkor-P
Die Attach	Ablestik 84-1LMIS R4
Lead Frame Material	Copper Olin 151
Bond Wire Type	Gold
Bond Wire Dia. (mils)	1.30
Mold Compound	Sumitomo 6300H
Lead Finish	Tin / Lead Solder Plate
Moisture Sensitivity Level	3
Maximum Peak Reflow (°C)	230

Table 8: ADP1653 Product Characteristics

Device	
Maximum Power Dissipation (W)	0.5
Device / Die ID	6568Z
Die Size (mm)	1.45 x 1.45
Wafer Fabrication Site	ADI-Limerick 8”
Wafer Fabrication Process	0.6um DPTM CMOS
Transistor Count	9 thousand
Passivation Layer	undoped-oxide/OxyNitride
Bond Pad Metal Composition	AlCu
Maximum Power Dissipation (W)	0.5
Device / Die ID	6568ZD
Die Size (mm)	1.45 x 1.45
Wafer Fabrication Site	ADI-Limerick 8”
Wafer Fabrication Process	0.6um DPTM CMOS
Transistor Count	9 thousand
Passivation Layer	undoped-oxide/OxyNitride
Bond Pad Metal Composition	AlSiCu
Package/Assembly	
Available Package(s)	16-LFCSP
Body Size (mm)	3.00 x 3.00 x .95
Assembly Location	Amkor-K
Die Attach	Ablestik 8290
Lead Frame Material	Copper
Bond Wire Type	Gold
Bond Wire Dia. (mils)	1.20
Mold Compound	Sumitomo G700
Lead Finish	Tin Plate
Moisture Sensitivity Level	3
Maximum Peak Reflow (°C)	260

Table 9: ADP1823 Product Characteristics

Device	
Maximum Power Dissipation (W)	1
Die Size (mm)	1.83 x 2.05
Wafer Fabrication Site	ADI-Limerick 8”
Wafer Fabrication Process	0.6um DPDM CMOS
Transistor Count	2097
Passivation Layer	undoped-oxide/OxyNitride
Bond Pad Metal Composition	AlCu
Package/Assembly	
Available Package(s)	32-LFCSP
Assembly Location	Amkor-K
Die Attach	Ablestik 8290
Lead Frame Material	Copper Olin 194
Bond Wire Type	Gold
Bond Wire Dia. (mils)	1.00
Mold Compound	Sumitomo G700
Lead Finish	Tin Plate
Moisture Sensitivity Level	3
Maximum Peak Reflow (°C)	260

Table 10: ADP3208 Product Characteristics

Device	
Maximum Power Dissipation (W)	0.11
Die Size (mm)	1.96 x 2.66
Wafer Fabrication Site	ADI-Limerick 8”
Wafer Fabrication Process	H6DPDMNLRI
Transistor Count	3000
Passivation Layer	undoped-oxide/SiN
Bond Pad Metal Composition	AlCu
Package/Assembly	
Available Package(s)	48-LFCSP
Body Size (mm)	7.00 x 7.00 x .85
Assembly Location	Amkor-K
Die Attach	Ablestik 8290
Lead Frame Material	Copper
Bond Wire Type	Gold
Bond Wire Dia. (mils)	1.00
Mold Compound	Sumitomo G700
Lead Finish	Tin Plate
Moisture Sensitivity Level	3
Maximum Peak Reflow (°C)	260

Table 11: ADP3209 Product Characteristics

Device	
Maximum Power Dissipation (W)	0.11
Die Size (mm)	1.96 x 2.66
Wafer Fabrication Site	ADI-Limerick 8”
Wafer Fabrication Process	0.6µm 2P2M HV CMOS
Transistor Count	3000
Passivation Layer	undoped-oxide/SiN
Bond Pad Metal Composition	AlCu
Package/Assembly	
Available Package(s)	32-LFCSP
Body Size (mm)	5.0 x 5.0 x 1.0
Assembly Location	Amkor-K
Die Attach	Ablestik 8290
Lead Frame Material	Copper Olin 194
Bond Wire Type	Gold
Bond Wire Dia. (mils)	1.00
Mold Compound	Sumitomo G700
Lead Finish	Tin Plate
Moisture Sensitivity Level	3
Maximum Peak Reflow (°C)	260

Description/Results of Tests Performed

Tables 12-13 provides a description of the qualification tests conducted and the associated test results on the AD5398 YG06, AD5398 YH14, ADP1653, ADP1823, ADD8754, ADD8754D, ADP3207, ADP3207A, ADP3208, ADP3209 and the X402. Two lots were qualified in Qual Plan #6396 and one lot was qualified in Qual Plan #6500 for the AD5398.

Table 12: Package Qualification Test Results from QP6396

Test Name	Conditions	Specification	Device	Package	Lot Num	Sample Size	Qty. Rejects
Autoclave [1]	121C 100%RH 2atm 168hrs	JEDEC-STD-22, Method A102	AD5398	8-LFCSP	AA40489.1	77	0
					AA50891.1	77	0
HTS	150C 1000hrs	JEDEC-STD-22, Method A103	AD5398	8-LFCSP	AA40343.1	77	0
					AA50893.1	77	0
			X402	44-PLCC	f159859.3	76	0
					f159972.2	45	0
					f159973.4	45	0
SHR [1]	See Below	ADI-0049	AD5398	8-LFCSP	AA40339.1	25	0
					AA52997.1	10	0
Temp Cycle [1]	-65C/+150C 500cycles	JEDEC-STD-22, Method A104	AD5398	8-LFCSP	AA40344.1	77	0
					AA50895.1	77	0
			X402	44-PLCC	f159970.2	48	0
					f159972.4	45	0
					f159978.4	45	0
SHR [2]	See Below	ADI-0049	ADP1653 rev-b	16-LFCSP	AA71942.1	15	0
SHR [2]	See Below	ADI-0049	ADP1653 rev-c	16-LFCSP	AA55280.1	15	0
SHR [2]	See Below	ADI-0049	ADP3207A	40-LFCSP	AB82992.1	20	0
SHR [2]	See Below	ADI-0049	ADP3207	40-LFCSP	AA42967.1	20	0
SHR [2]	See Below	ADI-0049	ADD8754	24-LFCSP	AA50896.1	20	0
SHR [2]	See Below	ADI-0049	ADD8754D	24-LFCSP	AD23125.1	20	0
SHR [2]	See Below	ADI-0049	ADP1823	32-LFCSP	AB86438.1	15	0
SHR [2]	See Below	ADI-0049	ADP3208	48-LFCSP	AA80830.1	20	0
SHR [2]	See Below	ADI-0049	ADP3209	32-LFCSP	S156503.6	15	0

Table 13: Package Qualification Test Results from QP6500

Test Name	Conditions	Specification	Device	Package	Lot Num	Sample Size	Qty. Rejects
Autoclave [1]	121C 100%RH 2atm 168hrs	JEDEC-STD-22, Method A102	AD5398	8-LFCSP	AA42946.1	77	0
HTS	150C 1000hrs	JEDEC-STD-22, Method A103	AD5398	8-LFCSP	AA42958.1	77	0
SHR [1]	See Below	ADI-0049	AD5398	8-LFCSP	AA42959.1	10	0
Temp Cycle [1]	-65C/+150C 500cycles	JEDEC-STD-22, Method A104	AD5398	8-LFCSP	AA34423.1	77	0

[1] These Samples were subjected to preconditioning (per J-STD-020 Level 1) prior to the start of the stress test. Level 1 preconditioning consists of the following:

- Bake: 24 hrs @ 125°C
- Unbiased Soak: 168 hrs @ 85°C, 85%RH
- Reflow: 3 passes through an oven with a peak temperature of 260+0/-5°C

[2] These Samples were subjected to preconditioning (per J-STD-020 Level 3) prior to the start of the stress test. Level 1 preconditioning consists of the following:

- Bake: 24 hrs @ 125°C
- Unbiased Soak: 192 hrs @ 30°C, 60%RH
- Reflow: 3 passes through an oven with a peak temperature of 260+0/-5°C

Samples of the many devices manufactured with this packaging technology are continuously undergoing reliability evaluation as part of the ADI Reliability Monitor Program. Additional qualification data is available on Analog Devices' web site at: http://www.analog.com/world/quality/read/1stpage.html.

Table 14: Process Qualification Test Results for QP6396

Test Name	Conditions	Specification	Part Number	Fab Process	Lot Number	Sample Size	Qty. Rejects
ELF	125C 48hrs	MIL-STD-883, Method 1015	AD5398	0.6um DPTM CMOS	AA40487.1	38	0
					AA51034.1	33	0
HAST [1]	130C 85%RH 2atm, Biased 96hrs	JEDEC-STD-22, Method A110	AD5398	0.6um DPTM CMOS	AA40342.1	77	0
					AA50892.1	77	0
HTOL	125C<Tj<135C, Biased 1000hrs	JESD22-A108	AD5398	0.6um DPTM CMOS	AA40514.1	50	0
					AA48457.1	45	0
ELF	125C 48hrs	MIL-STD-883, Method 1015	X402	NA	f159858.2	52	0
					f159954.2	209	0
					f159971.1	200	0
					f159978.2	191	0
HAST [1]	130C 85%RH 2atm, Biased 96hrs	JEDEC-STD-22, Method A110	X402	NA	f159859.4	77	0
					f159972.3	77	0
					f159978.3	77	0
HTOL	150C<Tj<175C, Biased 500hrs	JESD22-A108	X402	NA	f159858.1	77	0
					f159955.2	80	0
					f159973.2	77	0
ELF	125C 48hrs	MIL-STD-883, Method 1015	ADP3207	H6DPDMPNLR	AA42968	100	0
HTOL	125C<Tj<135C, Biased 1000hrs	JESD22-A108	ADP3207	H6DPDMPNLR	AA42968.2	77	0
ELF	125C 48hrs	MIL-STD-883, Method 1015	ADD8754	0.6um DPTM CMOS	AA50897.1	100	0
HTOL	125C<Tj<135C, Biased 1000hrs	JESD22-A108	ADD8754	0.6um DPTM CMOS	AA50897.1	77	0
ELF	125C 48hrs	MIL-STD-883, Method 1015	ADP3208	H6DPDMPNLR	S148060	100	0
HTOL	125C<Tj<135C, Biased 1000hrs	JESD22-A108	ADP3208	H6DPDMPNLR	AA80830.3	77	0

Table 15: Process Qualification Test Results for QP6500

Test Name	Conditions	Specification	Part Number	Fab Process	Lot Number	Sample Size	Qty. Rejects
ELF	125C 48hrs	MIL-STD-883, Method 1015	AD5398	0.6um DPTM CMOS	AA32245.1	100	0
HAST [1]	130C 85%RH 2atm, Biased 96hrs	JEDEC-STD-22, Method A110	AD5398	0.6um DPTM CMOS	AA34421.1	77	0
HTOL	125C<Tj<135C, Biased 1000hrs	JESD22-A108	AD5398	0.6um DPTM CMOS	AA32246.1	95	0

[1] These Samples were subjected to preconditioning (per J-STD-020 Level 1) prior to the start of the stress test. Level 1 preconditioning consists of the following:

- Bake: 24 hrs @ 125°C
- Unbiased Soak: 168 hrs @ 85°C, 85%RH
- Reflow: 3 passes through an oven with a peak temperature of 260+0/-5°C

Samples of the many devices manufactured with these process technologies are continuously undergoing reliability evaluation as part of the ADI Reliability Monitor Program. Additional qualification data is available on Analog Devices' web site at: http://www.analog.com/world/quality/read/1stpage.html.

ESD Testing

The results of Human Body Model (HBM) and Field Induced Charge Device Model (FICDM) ESD testing are summarized in table 16 to 33.

ADI measures ESD results using stringent test procedures based on the specifications listed in the above table. Any comparison with another supplier's results should ensure that the same ESD test procedures have been used. For further details, please see the EOS/ESD chapter of the ADI Reliability Handbook at http://www.analog.com/world/quality/manuals/.

Table 16: AD5398 ESD Test Results

ESD Model	Package	ESD Test Spec	RC Network	Acc/rej limit	Class
FICDM	8-LFCSP	ESD Assoc. STM5.3.1-1999	1Ω, Cpkg	pass +/- .25kV	C3
HBM	8-LFCSP	ESD Assoc. STM5.1-2001	1.5kΩ, 100pF	pass +/-1.5kV	1C

Table 17: AD5821 ESD Test Results

ESD Model	Package	ESD Test Spec	RC Network	Acc/rej limit	Class
FICDM	8-LFCSP	ESD Assoc. STM5.3.1-1999	1Ω, Cpkg	.25Kv/0.5kV	C3
HBM	8-LFCSP	ESD Assoc. STM5.1-2001	1.5kΩ, 100pF	1.6kV/1.7kV	1C

Table 18: ADP3207A ESD Test Results

ESD Model	Package	ESD Test Spec	RC Network	Acc/rej limit	Class
FICDM	40-LFCSP	ESD Assoc. STM5.3.1-1999	1Ω, Cpkg	+/-1kV	C5
HBM	40-LFCSP	ESD Assoc. STM5.1-2001	1.5kΩ, 100pF	+/-3.5kV	2

Table 19: ADD8754 ESD Test Results

ESD Model	Package	ESD Test Spec	RC Network	Acc/rej limit	Class
FICDM	16-LFCSP	ESD Assoc. STM5.3.1-1999	1Ω, Cpkg	+/-1.5kV	C6
MM	16-LFCSP	ESD Assoc. STM5.2-1999	0kΩ, 200pF	+/-0.2kV	M3
HBM	16-LFCSP	ESD Assoc. STM5.1-2001	1.5kΩ, 100pF	+/-2.5kV	2

Table 20: ADD8754D ESD Test Results

ESD Model	Package	ESD Test Spec	RC Network	Acc/rej limit	Class
FICDM	16-LFCSP	ESD Assoc. STM5.3.1-1999	1Ω, Cpkg	+/-1.5kV	C6
MM	16-LFCSP	ESD Assoc. STM5.2-1999	0kΩ, 200pF	+/-0.2kV	M3
HBM	16-LFCSP	ESD Assoc. STM5.1-2001	1.5kΩ, 100pF	+/-4.0kV	3A

Table 21: ADP3207 ESD Test Results

ESD Model	Package	ESD Test Spec	RC Network	Acc/rej limit	Class
FICDM	24-LFCSP	ESD Assoc. STM5.3.1-1999	1Ω, Cpkg	+/-0.5kV	C4
HBM	24-LFCSP	ESD Assoc. STM5.1-2001	1.5kΩ, 100pF	+/-2.5kV	2

Table 22: ADP1653 ESD Test Results

ESD Model	Package	ESD Test Spec	RC Network	Acc/rej limit	Class
FICDM	40-LFCSP	ESD Assoc. STM5.3.1-1999	1Ω, Cpkg	+/-1.0kV	C5
HBM	40-LFCSP	ESD Assoc. STM5.1-2001	1.5kΩ, 100pF	+/-2.0kV	2

Table 23: ADP1823 ESD Test Results

ESD Model	Package	ESD Test Spec	RC Network	Acc/rej limit	Class
FICDM	32-LFCSP	ESD Assoc. STM5.3.1-1999	1Ω, Cpkg	+/-0.5kV	C4
HBM	32-LFCSP	ESD Assoc. STM5.1-2001	1.5kΩ, 100pF	+/-2.0kV	2

Table 24: ADP3208 ESD Test Results

ESD Model	Package	ESD Test Spec	RC Network	Acc/rej limit	Class
FICDM	48-LFCSP	ESD Assoc. STM5.3.1-1999	1Ω, Cpkg	+/-0.25kV	C1
HBM	48-LFCSP	ESD Assoc. STM5.1-2001	1.5kΩ, 100pF	+/-1.0kV	1C

Table 25: ADP3209 ESD Test Results

ESD Model	Package	ESD Test Spec	RC Network	Acc/rej limit	Class
FICDM	32-LFCSP	ESD Assoc. STM5.3.1-1999	1Ω, Cpkg	+/-0.5kV	C4
HBM	32-LFCSP	ESD Assoc. STM5.1-2001	1.5kΩ, 100pF	+/-2.0kV	2
MM	32-LFCSP	ESD Assoc. STM5.2-1999	0kΩ, 200pF	+/-0.2kV	M3

Table 26: ADE7754 ESD Test Results

ESD Model	Package	ESD Test Spec	RC Network	Acc/rej limit	Class
FICDM	48-LFCSP	ESD Assoc. STM5.3.1-1999	1Ω, Cpkg	+/-0.25kV	C1
HBM	48-LFCSP	ESD Assoc. STM5.1-2001	1.5kΩ, 100pF	+/-1.5kV	1C

Table 27: AD7843 ESD Test Results

ESD Model	Package	ESD Test Spec	RC Network	Acc/rej limit	Class
FICDM	48-LFCSP	ESD Assoc. STM5.3.1-1999	1Ω, Cpkg	+/-1.0kV	C5
HBM	48-LFCSP	ESD Assoc. STM5.1-2001	1.5kΩ, 100pF	+/-1.5kV	1C

Table 28: AD7476 ESD Test Results

ESD Model	Package	ESD Test Spec	RC Network	Acc/rej limit	Class
FICDM	48-LFCSP	ESD Assoc. STM5.3.1-1999	1Ω, Cpkg	+/-1.0kV	C5
HBM	48-LFCSP	ESD Assoc. STM5.1-2001	1.5kΩ, 100pF	+/-4.0kV	3A

Table 29: AD7418 ESD Test Results

ESD Model	Package	ESD Test Spec	RC Network	Acc/rej limit	Class
FICDM	48-LFCSP	ESD Assoc. STM5.3.1-1999	1Ω, Cpkg	+/-1.0kV	C5
HBM	48-LFCSP	ESD Assoc. STM5.1-2001	1.5kΩ, 100pF	+/-4.0kV	3A

Table 30: AD7417 ESD Test Results

ESD Model	Package	ESD Test Spec	RC Network	Acc/rej limit	Class
FICDM	48-LFCSP	ESD Assoc. STM5.3.1-1999	1Ω, Cpkg	+/-1.0kV	C5
HBM	48-LFCSP	ESD Assoc. STM5.1-2001	1.5kΩ, 100pF	+/-4.0kV	3A

Table 31: ADG758 ESD Test Results

ESD Model	Package	ESD Test Spec	RC Network	Acc/rej limit	Class
FICDM	48-LFCSP	ESD Assoc. STM5.3.1-1999	1Ω, Cpkg	+/-1.5kV	C5
HBM	48-LFCSP	ESD Assoc. STM5.1-2001	1.5kΩ, 100pF	+/-4.0kV	2

Table 32: AD73360 ESD Test Results

ESD Model	Package	ESD Test Spec	RC Network	Acc/rej limit	Class
HBM	48-LFCSP	ESD Assoc. STM5.1-2001	1.5kΩ, 100pF	+/-2.5kV	2

Table 33: AD8509 ESD Test Results

ESD Model	Package	ESD Test Spec	RC Network	Acc/rej limit	Class
FICDM	48-LFCSP	ESD Assoc. STM5.3.1-1999	1Ω, Cpkg	+/-0.5kV	C2
HBM	48-LFCSP	ESD Assoc. STM5.1-2001	1.5kΩ, 100pF	+/-3.0kV	2

Latch-up Testing

Six samples of the AD5398 passed Latch-up testing at Ta=25°C per JEDEC Standard JESD78, Class I, Level A.

Twelve samples of the AD5821 passed Latch-up testing at Ta=25°C per JEDEC Standard JESD78, Class I, Level A.

Twelve samples of the ADP3207A passed Latch-up testing at Ta=25°C per JEDEC Standard JESD78, Class I, Level A.

Twelve samples of the ADP3207 passed Latch-up testing at Ta=25°C per JEDEC Standard JESD78, Class I, Level A.

Twelve samples of the ADP1653 passed Latch-up testing at Ta=25°C per JEDEC Standard JESD78, Class I, Level A.

Twelve samples of the ADP1823 passed Latch-up testing at Ta=25°C per JEDEC Standard JESD78, Class I, Level A.

Twelve samples of the ADP3208 passed Latch-up testing at Ta=25°C per JEDEC Standard JESD78, Class I, Level A.

Twelve samples of the ADP3209 passed Latch-up testing at Ta=25°C per JEDEC Standard JESD78, Class I, Level A.

Twelve samples of the ADD8754D passed Latch-up testing at Ta=25°C per JEDEC Standard JESD78, Class I, Level A.

Latch-up was not completed on the ADD8754 as this part was not going to be released on 8" and was only being used as the qualification vehicle.

Approvals

Reliability Engineer: Fergus Downey
This report has been approved by electronic means (3.5).

Additional Information

Data sheets and other additional information are available on Analog Devices' web site at the addresses shown below.

Home Page:	http://www.analog.com
Sales Info:	http://www.analog.com/world/corp_fin/sales_directory/distrib.html
Reliability Data:	http://www.analog.com/world/quality/read/1stpage.html
Reliability Handbook:	http://www.analog.com/corporate/quality/manuals/

Appendix

A. Additional Transferred parts

A: Additional Transferred parts.

Part name	die #	Wafer Fabrication Process	Maximum Power Dissipation (W)	Die Size (mm)	Transistor Count
ADE7754	7754	C6DPTM	0.88	4.68x3.58	273337
AD7843	F734A	8C6DPDM	0.005675	1.82x2.08	5067
AD7477	N521A	8C6DPDML	0.01575	0.78x2.28	2624
AD7476	N52A	8C6DPDML	0.01575	0.78x2.28	2624
AD7418	D102A	8C6DPDM	0.0275	1.52x2.12	5799
AD7417	D101A	8C6DPDM	0.0275	1.52x2.12	5799
AD7416	D10A	8C6DPDM	0.0275	1.52x2.12	5799
AD5300	D122A	8C6DPDM	0.0045	0.75x1.35	2812
ADG758	A78A	8C6MDPTM	0.0063	1.30x2.00	
AD5206	6427Z	C6DPDM	0.003	2.34x2.896	5925
AD7303	J06C	8C6DPDMS	0.02	1.33x1.81	3904
ADW50009	J06C	8C6DPDMS	0.02	1.33x1.81	3904
AD11/2045	J06C	8C6DPDMS	0.02	1.33x1.81	3904
AD7730L	S402B	8C6DPDM	0.02	2.73x4.68	41000
AD9832	F05A	8C6DPDMS	0.132	2.60x2.60	31435
AD9835	F05A	8C6DPDMS	0.132	2.60x2.60	31435
AD5306	F47A	8C6DPDM	0.00545	2.07x2.85	13673
AD5316	F47A	8C6DPDM	0.00545	2.07x2.85	13673
AD5326	F471A	8C6DPDM	0.00545	2.07x2.85	13673
AD5307	F472A	8C6DPDM	0.00545	2.07x2.85	13673
AD5317	F472A	8C6DPDM	0.00545	2.07x2.85	13673
AD5327	F473A	8C6DPDM	0.00545	2.07x2.85	13673
AD8509	6411Z	8C6DPDM	0.042	1.77x2.42	1627
AD8511	6411Z	8C6DPDM	0.042	1.77x2.42	1627
AD5241-10	6432Z	8C6MDPDMR	0.00033	1.75x1.98	386
AD5241-100	6432Z	8C6MDPDMR	0.00033	1.75x1.98	386
AD5241-1	6432Z	8C6MDPDMR	0.00033	1.75x1.98	386
AD5242-10	6432Z	8C6MDPDMR	0.00033	1.75x1.98	386
AD5242-100	6432Z	8C6MDPDMR	0.00033	1.75x1.98	386
AD5242-1	6432Z	8C6MDPDMR	0.00033	1.75x1.98	386
AD7302	J07A	8C6DPDMS	0.02	1.66x1.92	4813
AD7801	J07A	8C6DPDMS	0.02	1.66x1.92	4813
AD73360	U60A	8C6DPDM	0.2	4.27x6.10	57380
AD7730	S40B	8C6DPDM	0.0675	2.73x4.68	41000
AD7731	S401B	8C6DPDM	0.0675	2.73x4.68	41000
AD5302	F44A	8C6DPDM	0.004	1.14x2.21	7325
AD7418 CHIPS	8YB07J02	8C6DPDM	0.0275	1.52x2.12	5799
AD5312	8YB42E01	8C6DPDM	0.004	1.14x2.21	7325
AD5322	8YB42E02	8C6DPDM	0.004	1.14x2.21	7325

AD5313	8YB42E04	8C6DPDM	0.004	1.14x2.22	7325
AD5323	8YB42E05	8C6DPDM	0.004	1.14x2.23	7325
AD5308	8YE02A	8C6DPDM	0.0021	2.70x2.61	20169
AD5328	8YE02A	8C6DPDM	0.0021	2.70x2.61	20169
AD5318	8YE02A	8C6DPDM	0.0021	2.70x2.61	20169
AD7904	8YE22C	8C6DPDM	0.01	2.30x2.62	7600
AD7914	8YE22C	8C6DPDM	0.01	2.30x2.62	7600
AD7923	8YE22C	8C6DPDM	0.01	2.30x2.62	7600
AD7918	8YE22C	8C6DPDM	0.01	2.30x2.62	7600
AD7924	8YE22C	8C6DPDM	0.01	2.30x2.62	7600
AD7928	8YE22C	8C6DPDM	0.01	2.30x2.62	7600
AD7927	8YE22C	8C6DPDM	0.01	2.30x2.62	7600
AD8607	8YE92B01	8C6DPDMLX	0.001	1.42x1.91	3332
AD8603	8YE79C02	8C6DPDML	0.0003	0.94x1.42	2322
MCPCHIPS	8YE22C	8C6DPDM	0.01	2.30x2.62	7600
AD7908	8YE22C	8C6DPDM	0.01	2.30x2.62	7600
ADG714	8YC46C06	8C6DPDM	0.072	1.30x2.01	1100
ADG725	8YD59E03/8YD59F03	8C6MDPTM	0.025	3.31x3.26	2500
ADG731	8YD59E02/8YD59F02	8C6MDPTM	0.025	3.31x3.26	2500
ADG732	8YD59F/8YD59E	8C6MDPTM	0.025	3.31x3.26	2500
ADG726	8YD59E01/8YD59F01	8C6MDPTM	0.025	3.31x3.26	2500
AD7478	8YC26D02	8C6DPDMLR	0.01575	0.78x2.28	2624
AD5160/AD5161/AD5245	8YE48B	8C6MDPDMR	0.0002	0.78x1.95	2532
AD5160/AD5161/AD5245	8YE48B01	8C6MDPDMR	0.0002	0.78x1.95	2532
AD5160/AD5161/AD5245	8YE48B02	8C6MDPDMR	0.0002	0.78x1.95	2532
AD5160/AD5161/AD5245	8YE48B03	8C6MDPDMR	0.0002	0.78x1.95	2532
ADP3041	8YD85D	8S6DPDMNT	0.2	1.44x1.82	232
AD9851	8YC13B	8C6DPDM	0.555	2.29x4.34	
AD7911/12/21/22	8YF06B	8C6DPTMLA	0.02	0.78x2.29	3820
AD8604	8YC69C	8C6DPDM	0.024	1.32x1.73	3229
AD5162-2.5	8YE98B07	8C6MDPDMR	0.006	1.47x1.71	6115
AD5162-100	8YE98B06	8C6MDPDMR	0.006	1.47x1.71	6115
AD5162-10	8YE98B04	8C6MDPDMR	0.006	1.47x1.71	6115
AD5172/AD5243-10	8YE98B	8C6MDPDMR	0.006	1.47x1.71	6115
AD5162-50	8YE98B05	8C6MDPDMR	0.006	1.47x1.71	6115
AD5172/AD5243-100	8YE98B02	8C6MDPDMR	0.006	1.47x1.71	6115
AD5172/AD5243-50	8YE98B01	8C6MDPDMR	0.006	1.47x1.71	6115
AD5172/AD5243-2.5	8YE98B03	8C6MDPDMR	0.006	1.47x1.71	6115
AD5173/AD5248-10	8YE98B08	8C6MDPDMR	0.006	1.47x1.71	6196
AD5170-10	8YE98B12	8C6MDPDMR	0.006	1.47x1.71	6196
AD5173/AD5248-2.5	8YE98B11	8C6MDPDMR	0.006	1.47x1.71	6196
AD5173/AD5248-100	8YE98B10	8C6MDPDMR	0.006	1.47x1.71	6196
AD7873	8YC72F02	8C6DPDM	0.006	2.00x1.79	5097

AD7656	8YG50E/8YG50F	8H6DPTMIL	0.15	4.60x5.49	55061
AD5170-2.5	8YE98B15	8C6MDPDMR	0.006	1.47x1.71	6196
AD7922	8YF06B	8C6DPTMLA	0.02	0.78x2.29	3820
AD5173/AD5248-50	8YE98B09	8C6MDPDMR	0.006	1.47x1.71	6196
AD7829	8YA73C	8C6DPDM	0.065	2.29x2.72	4549
AD5170-50	8YE98B13	8C6MDPDMR	0.006	1.47x1.71	6196
AD7822	8YA73C02	8C6DPDM	0.065	2.29x2.72	4549
AD7825	8YA73C01	8C6DPDM	0.065	2.29x2.72	4549
AD7829-1	8YA73C03	8C6DPDM	0.065	2.29x2.72	4549
AD5170-100	8YE98B14	8C6MDPDMR	0.006	1.47x1.71	6196
AD5301	8YH03B01	8C6DPDM	0.001375	0.79x2.17	2094
AD5301	8YH03B	8C6DPDM	0.001375	0.79x2.17	2094
AD5311	8YH03B02	8C6DPDM	0.001375	0.79x2.17	2094
AD5321	8YH03B04	8C6DPDM	0.001375	0.79x2.17	2094
AD5321	8YH03B05	8C6DPDM	0.001375	0.79x2.17	2094
AD5311	8YH03B03	8C6DPDM	0.001375	0.79x2.17	2094
ADM1175/6/7/8/91/92	YG56E	8H6DPTMPNLR	0.04	1.41x2.15	13500
AD7873	8YC72F02	8C6DPDM	0.006	2.00x1.79	5097
AD7545A MIL	8YE82I	8H6DPDMRB	0.013	1.80x1.83	154
AD7545ACHIPS	8YE82I	8H6DPDMRB	0.013	1.80x1.83	154
AD7545A	8YE82I	8H6DPDMRB	0.013	1.80x1.83	154
AD7545	8YE82I	8H6DPDMRB	0.013	1.80x1.83	154
PM7545	8YE82I	8H6DPDMRB	0.013	1.80x1.83	154
AD5333	8YC38D05	8C6DPDM	0.0036	1.90x2.76	13365
AD5332	8YC38D06	8C6DPDM	0.0036	1.90x2.76	13365
AD5331	8YC38D07	8C6DPDM	0.0036	1.90x2.76	13365
AD5330	8YC38D08	8C6DPDM	0.0036	1.90x2.76	13365
AD5343	8YC38D10	8C6DPDM	0.0036	1.90x2.76	13365
AD5341	8YC38D09	8C6DPDM	0.0036	1.90x2.76	13365
AD5335	8YC38D11	8C6DPDM	0.0036	1.90x2.76	13365
AD5344	8YC38D	8C6DPDM	0.0036	1.90x2.76	13365
AD5342	8YC38D01	8C6DPDM	0.0036	1.90x2.76	13365
AD5336	8YC38D02	8C6DPDM	0.0036	1.90x2.76	13365
AD5334	8YC38D03	8C6DPDM	0.0036	1.90x2.76	13365
AD5340	8YC38D04	8C6DPDM	0.0036	1.90x2.76	13365
ADG787	8YF71D02	8C6MDPTM	0.04	1.50x2.01	202
DAC8412	8YH39E	8H6DPDMPNRBX	0.51	5.80x4.55	3229
AD8602	6426y	8C6DPDM	0.012	1.40x0.95	2000
AD8511	6411ZA	8C6DPDM	0.042	1.77x2.42	1627
AD8509	6411ZA	8C6DPDM	0.042	1.77x2.42	1627
AD7303	J06C	8C6DPDMS	0.02	1.33x1.81	3904
AD5626	8YJ01C	H6DPDMPNR	0.15	3.06x2.93	3000
ADG706	8YC68C	8C6MDPDM	0.18	1.73x2.74	487

AD7740	8YC39E	8C6DPDM	0.0055	0.79x2.08	1900
DAC8413	8YH39E01/8YH39F01	8H6DPDMPNRBX	0.51	3.06x2.93	3229
AD5227-10	8YF37D	8C6MDPDMR	0.000015	0.52x1.40	1326
AD5227-100	8YF37E02	8C6MDPDMR	0.000015	0.52x1.40	1326
ADG819	8YD60E	8C6MDPTM	0.1	1.14x2.18	100
AD5725	8YH39E	8H6DPDMPNRBX	0.51	3.06x2.93	3229
AD5228-10	8YF37D	8C6MDPDMR	0.000015	0.52x1.40	1326
AD5228-100	8YF37E02	8C6MDPDMR	0.000015	0.52x1.40	1326
AD5228-50	8YF37E01	8C6MDPDMR	0.000015	0.52x1.40	1326
AD5725-1	8YH39E01	8H6DPDMPNRBX	0.51	3.06x2.93	3229
AD7490	8YD23E01	8C6DPDM	0.01	2.30x2.59	6862
AD7888	8YC54C	8C6DPDM	0.0165	1.70x2.05	3009
AD7888CHIPS	8YC54C	8C6DPDM	0.0165	1.70x2.05	3009
AD5227-50	8YF37E01	8C6MDPDMR	0.000015	0.52x1.40	1326
AD5373	8YJ20C/8YJ20D	8H6DPTMPNR	0.5	6.00x6.00	250000
DAC8412	8YH39F	8H6DPDMPNRBX	0.51	3.06x2.93	3000
AD5725-1	8YH39F01	8H6DPDMPNRBX	0.51	3.06x2.93	3229
AD5725	8YH39F	8H6DPDMPNRBX	0.51	3.06x2.93	3229
AD5371	8YJ20C/8YJ20D	8H6DPTMPNR	0.5	6.00x6.00	250000
AD5370	8YJ20C/8YJ20D	8H6DPTMPNR	0.5	6.00x6.00	250000
AD5372	8YJ20C/8YJ20D	8H6DPTMPNR	0.5	6.00x6.00	250000
AD5361	8YJ20C/8YJ20D	8H6DPTMPNR	0.5	6.00x6.00	250000
AD5362	8YJ20C/8YJ20D	8H6DPTMPNR	0.5	6.00x6.00	250000
AD5363	8YJ20C/8YJ20D	8H6DPTMPNR	0.5	6.00x6.00	250000
ADP1864	8YG03G	8H6DPDMPNLR	0.005	0.78x1.39	1100
AD5360	8YJ20C/8YJ20D	8H6DPTMPNR	0.5	6.00x6.00	250000
ADG707	8YC68C01	8C6MDPDM	0.018	1.73x2.74	487
AD7657	8YG50E	8H6DPTMIL	0.15	4.60X5.49	55061
AD7476A	N52A	8C6DPDM	0.01575	0.78x2.28	2624
ADG728	8YC46A02	8C6SPDM	0.072	1.30x2.01	1100
ADG739	8YC46A05	8C6SPDM	0.072	1.30x2.01	1100
AD5320	D123A	8C6DPDM	0.007	0.75x1.35	2812
AD7814	8YB87D05	8C6DPDM	0.006	0.79x2.17	3739
ADG801	8YD60E04	8C6MDPTM	0.1	1.14x2.18	100
ADG802	8YD60E07	8C6MDPTM	0.1	1.14x2.18	100
AD7814CHIPS	8YB87D05	8C6DPDM	0.006	0.79x2.17	3739
DAC8420	8YH94B	8H6DPDMPNRBX	0.255	2.87x2.85	
AD5726	8YH94B	8H6DPDMPNRBX	0.255	2.87x2.85	
AD7888MCPCHIPS	8YC54C	8C6DPDM	0.0165	1.70x2.05	3009
DAC8043A	8YJ19C/8YJ19A	8H6DPDMPNRB	0.05	1.09x0.91	
DAC8043	8YJ19C/8YJ19A	8H6DPDMPNRB	0.05	1.09x0.91	
AD5441	8YJ19C/8YJ19A	8H6DPDMPNRB	0.05	1.09x0.91	
ADG3300	8YF58C01	8C6DPTM	0.001	1.61x2.01	1100

ADG3308	8YF58C	8C6DPTM	0.001	1.61x2.01	1100
ADG3304	8YF58D02	8C6DPTM	0.001	1.61x2.01	1100
AD7414-0/-1/AD7415	8YC55D	8C6DPDM	0.006	0.79x0.87	5084
AD7414-2/-3	8YC55D01	8C6DPDM	0.006	0.79x0.87	5084
AD8668	8YH08C	8H6DPDMRI	0.096	1.85x2.49	1829
ADG715	8YC46D07	8C6MDPDM	0.072	1.29x2.01	1100
ADG884	8YF71D/8YF71E	8C6MDPTM	.256	1.50 x 2.02	202
ADM1170-1	8YG69G01	8H6DPTMPNLR	0.012	0.79x2.29	5000
ADM1170-2	8YG69G01	8H6DPTMPNLR	0.012	0.79x2.29	5000
ADM1171-1	8YG69G01	8H6DPTMPNLR	0.012	0.79x2.29	5000
ADM1171-2	8YG69G01	8H6DPTMPNLR	0.012	0.79x2.29	5000
ADM1172-1	8YG69G01	8H6DPTMPNLR	0.012	0.79x2.29	5000
ADM1172-2	8YG69G01	8H6DPTMPNLR	0.012	0.79x2.29	5000
ADM4210-1	8YG69G01	8H6DPTMPNLR	0.012	0.79x2.29	5000
ADM4210-2	8YG69G01	8H6DPTMPNLR	0.012	0.79x2.29	5000
ADM6819	8YG69G02	8H6DPTMPNLR	0.012	0.79x2.29	5000
ADM6820	8YG69G02	8H6DPTMPNLR	0.012	0.79x2.29	5000
ADP1821	8YF84E	8S6DPDMRN	0.500	1.32x1.58	2657
ADP1822	8YF84E	8S6DPDMRN	0.500	1.32x1.58	2657
AD5405	8YF11D	8C6MDPDMR	0.014	1.99x2.27	3760
ADG3304 WLCSP	8YF58D02	8C6DPTM	0.001	1.61X2.01	1100
AD5415	8YF11D02/D03/D05/D01	8C6MDPDMR	0.014	1.99x2.27	3760
AD7992/3/4/7/8	8YF47C	8C6DPTMA	0.008	1.77x2.28	-
ADM1170-1/-2	8YG69H01	8H6DPTMPNLR	0.012	0.79x2.29	5000
ADM1171-1/-2	8YG69H01	8H6DPTMPNLR	0.012	0.79x2.29	5000
ADM1172-1/-2	8YG69H01	8H6DPTMPNLR	0.012	0.79x2.29	5000
ADM4210-1/-2	8YG69H01	8H6DPTMPNLR	0.012	0.79x2.29	5000
ADM6819	8YG69H02	8H6DPTMPNLR	0.012	0.79x2.29	5000
ADM6820	8YG69H02	8H6DPTMPNLR	0.012	0.79x2.29	5000
ADG1434	8YH80B02	8H6DPTMI	0.050	2.445x2.445	200
ADG1408	8YH80B	8H6DPTMI	0.050	2.445x2.445	200
ADG1409	8YH80B01	8H6DPTMI	0.050	2.445x2.445	200
ADG1433	8YH80B03	8H6DPTMI	0.050	2.445x2.445	200
ADG1434	8YH80C04	8H6DPTMI	0.050	2.445x2.445	200
ADM4073F	8YG69H03	8H6DPTMPNLR	0.012	0.79x2.29	5000
ADM4073T	8YG69H05	8H6DPTMPNLR	0.012	0.79x2.29	5000
ADM4073H	8YG69H04	8H6DPTMPNLR	0.012	0.79x2.29	5000
AD8619	8YG70B01	8C6DPDMLX	0.001	1.42x1.67	553
ADG888 BUMPED	8YG37B	8C6MDPTM	0.360	2.00x2.00	329
AD8231	8YH98C	8H6DPDMLR	0.006	2.50x2.50	1700
ADG794	8YG84C	8C6MDPDM	0.001	0.87x1.08	52
ADG888	8YG37B	8C6MDPTM	0.360	2.00x2.00	329
AD5443	8YE84B	8C6MDPDMR	0.014	1.15x1.99	3481

AD5424	8YE84B	8C6MDPDMR	0.014	1.15x1.99	3481
AD5425	8YE84B	8C6MDPDMR	0.014	1.15x1.99	3481
AD5426	8YE84B	8C6MDPDMR	0.014	1.15x1.99	3481
AD5432	8YE84B	8C6MDPDMR	0.014	1.15x1.99	3481
AD5433	8YE84B	8C6MDPDMR	0.014	1.15x1.99	3481
AD5445	8YE84B	8C6MDPDMR	0.014	1.15x1.99	3481
ADR5040/1/3/4/5	8YH71C	8C6DPDMRX	0.050	0.76x0.87	1295
AD7817	8YA32G	8C6DPDM	0.010	1.62x2.05	4297
AD5628/48/66/68/78	8YG87D	8C6DPTMR	0.220	2.75x3.56	66389
ADG1208	8YG63C04	8H6DPTMI	0.200	1.34x1.33	200