

# M/A-COM ADBU ICs Standard Products Selection Guide

## Die Products

December 10, 2002

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Part No	Product Description	Samples Available	Frequency (GHz)	Bias (V)	Current (mA)	PSAT (dBm)	P1dB (dBm)	TOI (dB)	Gain (dB)	Noise Figure (dB)	Comments
<b>Power Amplifiers (1.5W or Greater)</b>											
MAAPGM0035-DIE	Power Amplifier	Yes	2.5 - 5.5	8 / -2	850	32	31	42	17	7	
MAAPGM0021-DIE	Power Amplifier	Yes	4.5 - 9.0	8 / -2	750	33	31	41	17	9	
MAAPGM0025-DIE	Power Amplifier	Yes	5.5 - 7.0	8 / -2	2500	38	36	43.3	17.5	5.25	
MAAPGM0024-DIE	Power Amplifier	Yes	7.5 - 10.5	8 / -2	2500	38	37		26	-	
MA08509D	Power Amplifier	Yes	8.0 - 11.0	10 / -2	4500	40			22	10	
MAAPGM0019-DIE	Power Amplifier	Yes	9.5 - 13.0	8 / -2	1200	32	31	38	18	10	
MAAPGM0016-DIE	Power Amplifier	Yes	11.5 - 15.0	8 / -2	2000	37	36		16	10	
MAAPGM0018-DIE	Power Amplifier	Yes	12.0 - 15.5	8 / -2	1300	33	32		20	10	
MAAPGM0043-DIE	Power Amplifier	Yes	13.5 - 15.0	8 / -2	1000	32	31	37	17	7	
MAAPGM0045-DIE	Power Amplifier	Jan-03	14.0 - 16.0	8 / -1.8	1000	33			20	-	

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**Note:** Sample availability refers to the Preliminary Release date.  
Release levels are defined on page 4

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<b>Driver Amplifiers (Less than 1.5W)</b>											
MAAPGM0026-DIE	Driver Amplifier	Yes	1.0 - 3.3	8 / -2	300	28	27	36	20	6	
MAAPGM0036-DIE	Driver Amplifier	Yes	1.2 - 3.2	8 / -2	700	31	30	40	20	5	
MAAPGM0027-DIE	Driver Amplifier	Yes	2.0 - 4.0	8 / -2	250	30	29	37	22	10	
MAAPGM0028-DIE	Driver Amplifier	Yes	2.0 - 8.0	8 / -2	450	28	26		14	10	
MAAPGM0022-DIE	Driver Amplifier	Yes	3.0 - 6.0	8 / -2	900	31	31	43	17	6	
MAAPGM0029-DIE	Driver Amplifier	Yes	3.5 - 6.5	8 / -2	400	31	30	42	20	7	
MAAPGM0030-DIE	Driver Amplifier	Yes	5.0 - 9.0	8 / -2	400	30	29	38	17	8	
MAAPGM0037-DIE	Driver Amplifier	Dec-02	6.0 - 14.0	8 / -1.8	400	30			12	10	
MAAPGM0051-DIE	Driver Amplifier	Yes	7.5 - 13.0	10 / -2	400	31	30	37	15	9	
MAAPGM0038-DIE	Driver Amplifier	Yes	7.5 - 13.5	8 / -2	1100	31	29	38	19	8	
MAAPGM0034-DIE	Driver Amplifier	Yes	8.0 - 12.5	10 / -2	200	28	26	33	15	8	
MAAPGM0039-DIE	Driver Amplifier	Yes	8.0 - 13.0	8 / -2	600	29	27	38	15	12	
MAAPGM0033-DIE	Driver Amplifier	Yes	9.5 - 11.0	10 / -2	400	30	29	35	14	6	
MAAPGM0040-DIE	Driver Amplifier	Yes	10.5 - 15.5	8 / -2	250	27	25	33	20	8	
MAAPGM0041-DIE	Driver Amplifier	Yes	11.0 - 15.0	8 / -2	600	31	30	35	20	6.5	
MAAPGM0042-DIE	Driver Amplifier	Yes	11.5 - 16.0	8 / -2	600	31	28	35	20	6.5	
MAAPGM0044-DIE	Driver Amplifier	Yes	11.5 - 17.0	8 / -2	300	27	26	36	20	10	
MAAPGM0005-DIE	Driver Amplifier	Yes	12.0 - 19.0	7	200	23	22	27	15	15	
MAAPGM0047-DIE	Driver Amplifier	Yes	16.0 - 19.5	8 / -2	350	26	24	27	15	12	
MAAPGM0046-DIE	Driver Amplifier	Dec-02	15.0 - 21.0	8 / -1.8	350	28			15	-	
MAAPGM0048-DIE	Driver Amplifier	Mar-03	21.0 - 26.0	6 / -1.6	600	27			13	-	
MAAPGM0049-DIE	Driver Amplifier	Mar-03	26.0 - 30.5	6 / -1.6	600	27			13	-	
MAAPGM0012-DIE	Driver Amplifier	Yes	31.5 - 36.0	5 / -1.2	200	17	16		16	-	
MAAPGM0013-DIE	Driver Amplifier	Yes	32.0 - 36.0	6 / -1.2	700	23	22		13	-	

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<b>Low Noise Amplifiers</b>											
MAALGM0003-DIE	Low Noise Amplifier	Yes	5.0 – 8.0	3 / -0.6	50		13	25	14	2.1	
MAALGM0002-DIE	Low Noise Amplifier	Yes	8.0 – 12.0	3 / -0.6	55		10	23	13	2.3	
MAALGM0004-DIE	Low Noise Amplifier	Yes	11.0 – 16.0	3 / -0.6	55		12	23	11	2.9	
MA01502D	Low Noise Amplifier / Limiter	Yes	8.5 – 12.0	5 / -5	200		20	13	14	2.7	10 Watt Limiter
MA01503D	Low Noise Amplifier / Limiter	Yes	8.5 – 12.0	5 / -5	300		20	8	19	2.7	10 Watt Limiter
<b>Distributed Amplifiers</b>											
MAAMGM0002-DIE	Driver Amplifier / Distributed	Yes	1 - 20	5/-5	180	21	20	31	9	-	
MAAMGM0003-DIE	Driver Amplifier / Distributed Variable	Yes	1 - 15	5/-5 Variable	480 (max)	26	25	39	7.5 (max)	-	Range=30dB

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<b>Control Devices</b>											
MA03501D	Control: Multifunction	Yes	8 - 11	5.0 / -4.0	275	22	21	26	18	10	Integrated SPC (TTL) / 5 Bit Atten / 6 Bit Phase
MA03503D	Control: Multifunction	Yes	8 - 11	5.0 / -4.0	325	23.5	22	28	18	10	Parallel (TTL) / 5 Bit Atten / 6 Bit Phase
MAATGM0001-DIE	Control: Attenuator	Yes	2.0 - 6.0	TTL / -5.0	<10		26 (Input)	36 (Input)	-3	-	0.56dB Resolution, 35.4dB Max. (6-bit)
MAATGM0004-DIE	Control: Attenuator	Yes	2.0 - 20.0	TTL / -5.0	<10		26 (Input)	32 (Input)	-4.5	-	0.75dB Resolution, 23.25dB Max. (5-bit)
MAPCGM0001-DIE	Control: Phase Shifter	Yes	1.0 - 1.9	TTL / -5.0	<10		27 (Input)	37 (Input)	-5.3	-	6-bit Phase shifter
MAPCGM0003-DIE	Control: Phase Shifter	Yes	2.3 - 4.1	TTL / -5.0	<10		23 (Input)	36 (Input)	-5.7	-	5.6 Degree Resolution (6-bit)
MAPCGM0002-DIE	Control: Phase Shifter	Yes	3.0 - 5.0	TTL / -5.0	<10		26 (Input)	32 (Input)	-6	-	5.6 Degree Resolution (6-bit)
MAPCGM0004-DIE	Control: Phase Shifter	Yes	6.0 - 18.0	TTL / -5.0	<10		19 (Input)	30 (Input)	-15	-	11.25 Degree Resolution (5-bit)
MAPCGM0005-DIE	Control: Phase Shifter	Yes	7.0 - 12.0	TTL / -5.0	<10		23 (Input)	35 (Input)	-10	-	5.6 Degree Resolution (6-bit)
FE53-0001	Control: Phase Shifter	Feb-02	8.0 - 11.0	0.0 / -5.0						-	5.6 Degree Resolution
MASWGM0002-DIE	Control: SPDT Switch	Yes	2.0 - 20.0	TTL / -5.0			26 (Input)	29 (Input)	-3.5	-	35 dB Isolation @ 20 GHz
MASWGM0003-DIE	Control: SPDT Switch	Yes	2.0 - 8.0	TTL / -5.0			26 (Input)	35 (Input)	-3.0	-	>45 dB Isolation, Nonreflective
MASWGM0001-DIE	Control: DPDT Switch	Yes	2.0 - 14.0	TTL / -5.0			25 (Input)	33 (Input)	-3.0	-	40dB Isolation, Nonreflective

### Release Levels

Advance - Planning and design phase. Datasheets with performance goals.

Preliminary - Product samples available. Datasheet with typical measured performance.

Final - Production quantities available. Datasheet with complete screening specifications.

### Contact Information

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