

# Bill of Materials

# ADM00600 Evaluation Board

Document Number: 02-10323  
 Board Number: 04-10323  
 Part Number: ADM00600  
 Revision: 1  
 Engineer: M. Williams  
 Drawn By: M. Williams



Creation Date: 4:45:26 PM  
 Print Date: 12:24:26 PM

Quantity	Designator	Description_	Manufacturer 1	Manufacturer Part Number 1	Supplier 1	Supplier Part Number 1
11	C1, C11, C17, C18, C23, C45, C46, C47, C50, C51, C52	CAP CER 1uF 10V 10% X7R SMD 0603	Taiyo Yuden	LMK107B7105KA-T	Digi-Key	587-1242-1-ND
7	C10, C13, C14, C15, C22, C24, C39	Cap Ceramic 1µF 50V 10% X7R 1210	Taiyo Yuden	UMK325B7105KH-T	Digi-Key	587-1366-1-ND
1	C2	Cap Ceramic 1800pF 50V 10% X7R 0805	AVX	08055C182KAT2A	Digi-Key	478-1374-2-ND
3	C29, C36, C38	CAP CER 22000pF 25V 10% X7R SMD 0603	AVX	06033C223KAT2A	Digi-Key	478-5896-1-ND
7	C3, C4, C5, C12, C20, C25, C43	CAP CER 10uF 16V 10% X7R SMD 1206	TDK	C3216X7R1C106K	Digi-Key	445-4042-1-ND
6	C30, C35, C37, C40, C41, C42	Cap Ceramic 100pF 50V 10% X7R 0603	Kemet	C0603C101K5RACTU	Digi-Key	399-7824-1-ND
4	C31, C32, C33, C34	CAP CER 47000pF 25V 10% X7R SMD 0603	Panasonic	ECJ-1VB1E473K	Digi-Key	PCC1771CT-ND
3	C44, C48, C49	CAP CER 0.1uF 25V 10% X7R SMD 0603	Murata	GRM188R71E104KA01D	Digi-Key	490-1524-1-ND
1	C6	CAP CER 220pF 50V 10% X7R SMD 0603	TDK	C1608X7R1H221K	Digi-Key	445-1306-1-ND
2	C7, C53	Cap Ceramic 10µF 50V 10% X5R 1210	Taiyo Yuden	UMK325BJ106KM-T	Digi-Key	587-2247-1-ND
2	C8, C9	Cap Alum-Elect 470µF 50V 20% Radial	United Chemi-com	EKZE500ELL471MK20S	Digi-Key	565-1712-ND
1	D1	Transient Voltage Suppressor 400W 5% 5V SMA	Vishay	SMAJ5.0A-E3/61	Digi-Key	SMAJ5.0A-E3/61GICT-ND
10	D17, D18, D19, D20, D21, D22, D23, D24, D25, D26	Light Emitting Diode Green, 2x1.2 MM, 570 NM, WTR CLR, SMD	KingBright Company LLC	APT2012CGCK	Digi-Key	754-1127-1-ND
4	D2, D3, D4, D5	DIO SCKTY SS24-TP 550mV 2A 40V SMD DO-214AC_SMA	Micro Commercial Co	SS24-TP	Digi-Key	SS24-TPMSCT-ND
3	D6, D8, D10	Transient Voltage Suppressor 400W 33V Unidirectional SMA	Vishay	SMAJ33A	Digi-Key	SMAJ33ALFCT-ND
1	D7	Transient Voltage Suppressor 400W 24V Unidirectional SMA	Vishay	SMAJ24A	Digi-Key	SMAJ24ALFCT-ND
1	D9	Transient Voltage Suppressor 400W 10V Unidirectional SMA	Vishay	SMAJ10A	Digi-Key	SMAJ10ALFCT-ND
1	J1	CONN HEADER 8POS .100 STR 30AU	FCI	68001-108HLF	Digi-Key	609-3273-ND
1	J2	CON MODULAR RJ25 TH R/A	TE Connectivity	5555165-1	Digi-Key	A31422-ND
1	J3	CONN TERM BLOCK 2.54MM 3POS	Phoenix Contact	1725669	Digi-Key	277-1274-ND
1	J4	CONN TERM BLOCK 2.54MM 2POS	Phoenix Contact	1725656	Digi-Key	277-1273-ND
1	J5	CONN TERM BLOCK 2.54MM 4POS	Phoenix Contact	1725672	Digi-Key	277-1275-ND
1	J6	CONN TERM BLOCK 2.54MM 5POS	Phoenix Contact	1725685	Digi-Key	277-1276-ND
3	JP1, JP2, JP13	CON HDR-2.54 Male 1x2 Tin 6.10MH TH VERT	Molex Inc	0022284020	Digi-Key	WM50014-02-ND
3	JP7, JP11, JP12	CON HDR-2.54 Male 1x3 Tin 6.75MH TH VERT	Molex Inc	90120-0123	Digi-Key	WM8073-ND
3	JP8, JP9, JP10	CON HDR-2.54 Male 2x3 Tin 5.84MH TH VERT	FCI	67996-406HLF	Digi-Key	609-3218-ND
1	L1	Inductor 3.3uH 100kHz	Würth	744-042-003	Mouser	710-744042003
7	Q1, Q2, Q3, Q4, Q5, Q6, Q7	MOSFET N-CH 60V 50A D-PAK	Fairchild	FDD10AN06A0	Digi-Key	FDD10AN06A0CT-ND
15	R1, R10, R24, R28, R58, R60, R64, R71, R76, R77, R78, R82, R84, R86, R87	RES TKF 47k 1% 1/10W SMD 0603	Stackpole Electronics Inc	RMCF 1/16 47K 1% R	Digi-Key	RMCF1/1647KFRTR-ND
1	R107	RES TKF 10.7k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF1072V	Digi-Key	P10.7KHCT-ND
1	R110	RES TKF 7.5k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF7501V	Digi-Key	P7.50KHCT-ND

2	R12, R37	RES 10k Ohm 1/10W 1% 0603 SMD	Panasonic - ECG	ERJ-3EKF1002V	Digi-Key	P10.0KHCT-ND
6	R15, R18, R21, R26, R36, R46	RES 47 OHM 1/8W 1% 0805 SMD	Yageo	RC0805FR-0747RL	Digi-Key	311-47.0CRCT-ND
3	R17, R20, R23	RES TKF 470k 1/10W 1% SMD 0603	Panasonic	ERJ-3EKF4703V	Digi-Key	P470KHCT-ND
6	R2, R30, R31, R32, R33, R44	RES TKF 22k 1% 1/10W SMD 0603	Stackpole Electronics Inc	RMCF0603JT2K0	Digi-Key	RMCF0603JT2K0CT-ND
4	R25, R38, R47, R62	RES TKF 2.49k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF2491V	Digi-Key	P2.49KHCT-ND
3	R29, R41, R56	RES TKF 120k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF1203V	Digi-Key	P120KHCT-ND
1	R3	RES TKF 1R 1% 1/10W SMD 0603	Panasonic	ERJ-3RQF1R0V	Digi-Key	P1.0AJCT-ND
4	R35, R39, R42, R45	RES TKF 300 ohm 1% 1/10W SMD 0603	Yageo	RC0603FR-07300RL	Digi-Key	311-300HRCT-ND
1	R4	RES TKF 18k 1% 1/10W SMD 0603	ROHM	MCR03EZPFX1802	Digi-Key	RHM18.0KHCT-ND
15	R5, R49, R63, R66, R72, R79, R83, R99, R100, R101, R102, R103, R104, R105, R106	RES TKF 1k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF1001V	Digi-Key	P1.00KHCT-ND
7	R50, R61, R65, R67, R80, R81, R97	RES TKF 3.74k 1% 1/10W SMD 0603	Yageo	RC0603FR-073K74L	Digi-Key	311-300HRCT-ND
4	R52, R53, R54, R55	RES TKF 2.4k 1% 1/10W SMD 0603	Yageo	RC0603FR-072K4L	Digi-Key	311-2.40KHCT-ND
1	R6	RES 4.99 OHM 1/8W 1% 0805 SMD	Yageo	RC0805FR-074R99L	Digi-Key	311-4.99CRCT-ND
3	R68, R69, R70	RES TKF 4.7k 1% 1/10W SMD 0603	ROHM	MCR03EZPFX4701	Digi-Key	RHM4.70KHCT-ND
1	R7	RES TKF 11k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF1102V	Digi-Key	P11.0KHCT-ND
3	R73, R74, R75	RES .010 OHM 5W 1% FLAT SMD	TT Electronics/IRC	OARSXPR010FLF	Digi-Key	989-1018-1-ND
3	R8, R98, R108	RES TKF 2k 1% 1/10W SMD 0603	Stackpole Electronics Inc	RMCF0603FT2K00	Digi-Key	RMCF0603FT2K00TR-ND
2	R89, R109	RES TKF 100R 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF1000V	Digi-Key	P100HCT-ND
3	R9, R11, R13	RES TKF 24.9R 1% 1/10W SMD 0603	Vishay Dale	CRCW060324R9FKEA	Digi-Key	541-24.9HCT-ND
3	R90, R91, R92	RES TKF 90.9k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF9092V	Digi-Key	P90.9KHTR-ND
1	R93	RES TKF 18.7k 1% 1/10W SMD 0603	Yageo	RC0603FR-0718K7L	Digi-Key	311-18.7KHCT-ND
1	R94	RES TKF 24.9k 1% 1/10W SMD 0603	Yageo	RC0603FR-0724K9L	Digi-Key	311-24.9KHCT-ND
1	R95	RES TKF 30k 1% 1/10W SMD 0603	Stackpole Electronics Inc	RMCF0603FT30K0	Digi-Key	RMCF0603FT30K0TR-ND
1	R96	Potentiometer 10K OHM 1/8W CARB VERTICAL	CTS Electrocomponents	296UD103B1N	Digi-Key	CT2265-ND
3	SW1, SW2, SW3	SWITCH TACT SPST 12V 50mA TL3301AF260QG SMD	E-Switch	TL3301AF260QG	Digi-Key	EG2527CT-ND
12	TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP8, TP9, TP10, TP11, TP12	SMT Test Point	Keystone	5016	Digi-Key	5016KTR-ND

**Microchip Parts listed below**

1	U1	MCHP ANALOG OPAMP 4-Ch 10MHz MCP6024-E/ST TSSOP-14	Microchip	MCP6024-E/ST	Microchip	MCP6024-E/ST
3	U2, U3, U6	MCHP ANALOG OPAMP 1-Ch 10MHz MCP6021T-E/OT SOT-23-5	Microchip	MCP6021T-E/OT	Microchip	MCP6021T-E/OT
1	U4	dsPIC33EP256MC504	Microchip	dsPIC33EP256MC504-I/PT	Microchip	dsPIC33EP256MC504-I/PT
1	U5	MCP8025 TQFP-48	Microchip	MCP8025-115E/PT	Microchip	MCP8025-115E/PT

**Mechanical Parts to be added in the package**

9	JP3	MECH HW JUMPER 2.54mm 1x2 Handle Gold	TE Connectivity	881545-2	Digi-Key	A26242-ND
4	Ea. Cornner bottom side of PCB	MECH HW RUBBER PAD SQ Taper 0.50x0.50x0.23 Black	3M	SJ-5518	Digi-Key	SJ5518-0-ND

**Do Not Populate Parts listed below**

6	C16, C19, C21, C26, C27, C28	CAP CER 0.1uF 100V 10% X7R SMD 0805	TDK	C2012X7R2A104K	Digi-Key	445-1418-1-ND
3	D11, D12, D14	Transient Voltage Suppressor 400W 30V Biidirectional SMA	Vishay	SMAJ30CA	Digi-Key	SMAJ30CA-E3/57TGICT-ND
3	D13, D15, D16	DIO SCTKY SS24-TP 550mV 2A 40V SMD DO-214AC_SMA	Micro Commercial Co	SS24-TP	Digi-Key	SS24-TPMSCT-ND
6	R16, R19, R22, R27, R40, R51	RES TKF 0.1R 1% 1/8W SMD 0805	Panasonic	ERJ-L06KF10CV	Digi-Key	P100LLCT-ND
3	R34, R43, R59	RES TKF 10R 1% 1/8W SMD 0805	ROHM	MCR10EZHF10R0	Digi-Key	RHM10.0CCT-ND

Approved	Notes	