## DAC-AK4458-1.0 Bill of Materials

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Reference	Quantity	Footprint	Value	Description	Power	Size	Tolerand	e Voltage	Туре	Current
C301 C314 C424 C425 C426		5 SMD-0805	100p	'Ceramic capacitor		'0805	'5%	'50V	'C0G	•
C302 C324 C401 C416 C420		5 CAP-TH-D6.3mmP2.5mm	220u	'Aluminium electrolytic low impedance capacitor - eg Panasonic FC or FR parts		'2.5mm Pitch, 6.3mm Diameter		'10V		•
C306 C310 C315		3 CAP-TH-D8mmP3.5mm	220u	'Aluminium electrolytic low impedance capacitor - eg Panasonic FC or FR parts		'3.5mm Pitch, 8mm Diameter		'25V		•
C307 C311 C316		3 SMD-0805	22u	'Ceramic capacitor		'0805	'20%	'25V	'X5R	
C304 C308 C312 C317 C320 C323 C403 C405 C408 C411 C414				·						
C418 C422 C428 C430 C602	1	6 SMD-0805	100n	'Ceramic capacitor		'0805	'10%	'50V	'X7R	.
C305 C309 C313 C318 C321 C406 C409 C412 C415 C419 C423										
C427 C603	1	3 SMD-0805	10n	'Ceramic capacitor	ŀ	'0805	'10%	'50V	'X7R	
C303 C319 C402 C417 C421		5 SMD-0805	22u	'Ceramic capacitor		'0805	'20%	'10V	'X5R	· _
C322		1 SMD-0805	N/F	'Ceramic capacitor - NOT FITTED	•	'0805	'10%	'50V	'X7R	'
C404 C407 C410 C413		4 CAP-TH-D6.3mmP2.5mm	47u	'Aluminium electrolytic low impedance capacitor - eg Panasonic FC or FR parts		'2.5mm Pitch, 6.3mm Diameter		'10V		-
C429		1 SMD-0603	1u	'Ceramic capacitor		'0603	'10%	'10V	'X7R	
C431 C601		2 SMD-0805	10u	'Ceramic capacitor		'0805	'20%	'10V	'X5R	·
C501 C502 C503 C504 C505 C506 C507 C508		8 SMD-0805	2n7	'Ceramic capacitor		'0805	'5%	'50V	'C0G	•
D301 D302 D303 D304 D305 D307 D601 D602		8 DIODE-SOD-123	1N5819HW	'1A 40V Schottky Rectifier - SOD-123		1				•
D306		1 SMD-1206	Green LED 1206	'Green LED - SMD - Vf 1.8V to 2.2V		1206		'		•
JP401 JP402 JP403 JP404 JP405 JP406 JP407 P601		8 CONN SIL 2 1MM	CONN 2x1	1x2 2.54mm pitch pin header		1				•
L301 L302 L401 L402 L403		5 SMD-0805	600R@100MHz	Ferrite bead, current rating 0.3A or higher, 600R@100MHz		'0805				'=>0.3A
P201		1 CONN SIL 3 1MM	CONN 3x1	1x3 2.54mm pitch pin header		1				· ·
P202 P203 P205 P206		4 CONN DIL 2X5 BOX 1MM	CONN 02X05	'2x5 2.54mm pitch box header	•	1		•	•	
P204		1 CONN DIL 2X6 BOX 1MM	CONN 02X06	'2x6 2.54mm pitch box header		1		,		•
P301 P302		2 CONN-2WAY-2.54mm-3.81mm-SPACING	CONN 2x1	'2 way screw terminal, 2.54mm to 3.81mm pitch		1		•		•
P501 P502		2 CONN DIL 2X10 BOX 1MM	CONN 02X10	'2x10 2.54mm pitch box header		1		•		<del>-</del> -
R101 R102 R103 R213 R218 R220 R229 R231 R304 R603		0 SMD-0805	1k	Thick or thin film resistor	'100mW	'0805	'1%	•		
R201 R202 R214 R215 R216 R217 R219 R230 R232		9 SMD-0805	N/F	Thick or thin film resistor	'100mW		'1%	•		•
R203 R204 R207 R209 R210 R211 R212 R227 R228 R404 R405										
R407 R415	1	3 SMD-0805	0	Thick or thin film resistor	'100mW	'0805	'1%			
R205 R206 R208 R221 R222 R223 R224 R225 R226 R408 R409										
R410 R411 R412 R413 R414	1	6 SMD-0805	10k	Thick or thin film resistor	'100mW	'0805	'1%			·
R301		1 SMD-0805	6k8	Thick or thin film resistor	'100mW	'0805	'1%	•		'
R302		1 SMD-0805	2k2	'Thick or thin film resistor	'100mW	'0805	'1%	•		-
R303 R305 R401 R402 R403		5 SMD-0805	47	Thick or thin film resistor	'100mW	'0805	'1%			
R306		1 SMD-0805	10K	Thick or thin film resistor	'100mW	'0805	'1%			· _
R307		1 SMD-0805	220K	Thick or thin film resistor	'100mW	'0805	'1%	•	•	'
R501 R503 R509 R511 R513 R515 R521 R523 R525 R527 R533										
R535 R537 R539 R545 R547	1	6 SMD-1206	240	MELF0204 1% =>250mW or 1206 1% =>250mW	'250mW	1206	'1%			·
R502 R504 R510 R512 R514 R516 R522 R524 R526 R528 R534										
R536 R538 R540 R546 R548	1	6 SMD-1206	100	MELF0204 1% =>250mW or 1206 1% =>250mW	'250mW	'1206	'1%	'		
R505 R506 R507 R508 R517 R518 R519 R520 R529 R530 R531										
R532 R541 R542 R543 R544		6 SMD-1206	100k	MELF0204 1% =>250mW or 1206 1% =>250mW	'250mW	1206	'1%	'		'
R601		1 SMD-0805	100	Thick or thin film resistor	'100mW	'0805	'1%	'		'
R602		1 SMD-0805	100k	'Thick or thin film resistor	'100mW	'0805	'1%	'	'	'
U301		1 IC-SOT223-6	TPS7A4501DCQ	'TI TPS7A4501DCQ Regulator	'	'	'	'	'	
U302		1 IC-SOT23-5	TLV70033DDC	'TLV700 200-mA, Low-IQ, Low-Dropout Regulator	•	1	<u>'</u>		'	
U401		1 IC_QFN_48_5.1mmpad_HF_HS	AK4458VN	'AK4458 8ch Premium DAC		'	'		'	'
U601		1 IC-SOT143	CAT811TTBI	'CAT811/ADM811 - 4-Pin Microprocessor Power Supply Supervisor with Manual Reset - Active Low	•	'	'	'		'