

AMBE-3000™-HDK Bill of Materials Revision: 3

Item	Qty	Reference	Part	Manufacturer	Manufacturer Number	Vendor	Vendor Number
Doord							
Board							
HD3K-1			Bare Board			Advanced	
TIDOIX-1			Dale Boald			Circuits	

Capacitors

HDK3K-2	35	C1, C4, C7, C8, C9, C10, C11, C12, C14, C15, C16, C18, C20, C21, C24, C28, C32, C33, C34, C36, C37, C38, C39, C41, C42, C43, C46, C47, C48, C49, C50, C61, C62, C63, C64	CAP CER .1UF 10V 10% X5R 0402	AVX	0402ZD104KAT2A	Digikey	490-1318-1-ND
HDK3K-3	2	C3, C6	CAP .01UF 50V CERAMIC Y5V 0402	Panasonic	ECJ-0EF1H103Z	Digikey	PCC1747TR-ND
HDK3K-4	5	C2, C5, C13, C29, C52	CAP CERAMIC 1.0UF 10V X5R 0603	Kemet	C0603C105K8PACT U	Digikey/Arrow	399-3118-1-ND
HDK3K-5	2	C30, C31	CAP CER 10UF 16V X5R 0805	Taiyo Yuden	EMK212BJ106KG-T	Digikey/Arrow	587-1295-2-ND
HDK3K-6 HDK3K-7	1 2	C40 C44, C45	CAP 10UF 6.3V CERAMIC 0805 Y5V CAP CERAMIC 10PF 50V NP0 0402	Panasonic AVX	ECJ-2FF0J106Z 04025A100JAT2A	Digikey Digikey	PCC2182TR-ND 311-1014-1-ND
призи-1		44, 645	CAP CERAIVIIC 10FF 50V NF0 0402	AVA	04025A1005A12A	Digikey	311-1014-1-ND
HDK3K-8	5	C51, C53, C57, C58, C59	CAPACITOR TANT 10UF 10V 20% SMD	Kemet	T491A106M010AT	Digikey/Avnet	399-3686-2-ND
			T491				
HDK3K-8A	1	C60	CAPACITOR TANT 10UF 10V 20% SMD3528-21 (EIA)	Kemet	T494B106M010AT		399-3831-2-ND
			T494				
HDK3K-9	2	C65, C66	CAP 22PF 50V CERAMIC NP0 0402	AVX	04025A220JAT2A	Digikey	311-1018-1-ND
HDK3K-10	2	C67, C68	CAP CERAMIC 33PF 50V NP0 0402	AVX	04025A330JAT2A	Digikey	311-1020-1-ND



Diodes and Ferrites

HDK3K-11	16	D9, D10, D11, D12, D13, D14, D15, D16, D17, D27, D28, D29, D30, D31, D35, D36	TVS 10 VOLT 600 WATT BI-DIR SMB	Little fuse Inc	SMBJ10CA	Digikey	SMBJ10CALFCT-ND
HDK3K-12	19	D1, D2, D3, D4, D5, D6, D7, D8, D18, D19, D20, D21, D22, D23, D24, D25, D26, D32, D33	LED RED CLEAR GULL WING SMD	Chicago Miniature/SLI	CMD28-21VRC/TR8	Digikey	L62601CT-ND
HDK3K-14	1	F1	FERRITE CHIP 330 OHM 2.5A 0805	TDK	MPZ2012S331A	Digikey	445-1569-1-ND

Connectors and Headers

HDK3K-15	4	JP1, JP2, JP4, JP12	HDR 8x1 CONN HEADER 8POS .100 VERT TIN	Molex	22-03-2081	Digikey	WM4006-ND
HDK3K-16	1	JP3 DNP	CONN HEADER .100 DUAL STR 14POS	3M	929836-09-07-RK	Digikey	929836E-09-07-ND
HDK3K-17	1	JP5	HDR 12x1 CONN HEADER .100 SNGL STR 12POS	3M	929834-02-12-RK	Digikey	929834E-02-12-ND
HDK3K-18	1	JP7	HDR 4x1 CONN HEADER .100 SNGL STR 4POS	3M	929834-02-04-RK	Digikey	929834E-02-04-ND
HDK3K-19	1	JP8	HDR 4X2 CONN HEADER .100 DUAL STR 8POS	3M	929836-09-04-RK	Digikey	929836E-09-04-ND
HDK3K-20	1	JP10	HEADER 7X2 with shroud CONN HEADER 14POS .100 VERT GOLD	Molex	70246-1401	Newark	26K8905
HDK3K-21	1	JP11	HDR 8x2 CONN HEADER .100 DUAL STR 16POS	3M	929836-09-08-RK	Digikey	929836E-09-08-ND
HDK3K-22	1	JP13	HDR 1x2 CONN HEADER .100 SNGL STR 2POS	3M	929834-02-02-RK	Digikey	929834E-02-02-ND
HDK3K-23	2	P1,P2	CONN D-SUB RCPT R/A 9POS 30GOLD	Tyco/AMP	5747844-6	Digikey	A32119-ND
HDK3K-24	1	P3	CONN MODULAR JACK 4-4 RT ANG SMD	Molex	95501-6449	Arrow	WM5573-ND
HDK3K-25	2	J2,J3	smt-3.5mm-3pin AUDIO JACK 3.5MM STEREO SMD	CUI Inc.	SJ-3523-SMT	Digikey	CP-3523SJCT-ND
HDK3K-26	1	P5	CONN POWER JACK 2.1X5.5MM SMD	CUI Inc.	PJ-002A-SMT	Digikey	CP-002APJCT-ND
HDK3K-27	1	P6	CONN RECEPT MINIUSB R/A 5POS SMD	Molex	54819-0572	Digikey/Arrow	WM17116TR-ND



Resistors

HDK3K-28	9	R1, R2, R3, R4, R44, R46, R47, R61, R62	RES 1.00K OHM 1/16W 1% SMD 0402	KOA	RK73H1ETTP1001F	Digikey	RT0402FRE071KL-ND
HDK3K-29	22	R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R45, R52, R56, R65, R66	0402 10K 50V	КОА	RK73H1ETTP1002F	Taitron	RC1005F1002CS
HDK3K-30	1	R30	RES 24.9K OHM 1/16W 0.5% 0402SMD	Susumu	RR0510P-2492-D	Digikey	RR05P24.9KDTR-ND
HDK3K-31	2	R31, R32	RES 200 OHM 1/16W 5% 0402 SMD	KOA	RK73B1ETTP201J	Digikey	P200JCT-ND
HDK3K-32	1	R33	RES 2.2K OHM 1/16W 5% 0402 SMD	KOA	RK73B1ETTP222J	Digikey	541-2.2KJTR-ND
HDK-3K- 33A	1	R34	0 OHM 1/16W 5% 0402 SMD		ERJ-2GE0R00X		P0.0JTR-ND
HDK3K-34	1	R35	RES 100K OHM 1/16W 0.1% 0402 SMD	Susumu	RG1005P-104-B-T5	Digikey	RG10P100KBTR-ND
HDK3K-35	1	R48	RES 15.8K OHM 1/16W 1% SMD 0402	Panasonic	ERJ-2RKF1582X	Digikey	P15.8KLTR-ND
HDK3K-36	2	R49, R54	RES 4.7K OHM 1/16W .5% 0402 SMD	Susumu	RR0510P-472-D	Digikey	RR05P4.7KDCT-ND
HDK3K-37	1	R50	RES 620 OHM 1/16W 0.5% 0402 SMD	Susumu	RG1005P-621-D-T10	Digikey	RG10P620DTR-ND
HDK3K-38	1	R51	RES 1.50K OHM 1/16W 1% SMD 0402	KOA	RK73H1ETTP1501F	Digikey	RT0402FRE071K5L-ND
HDK3K-39	1	R53	RES 30.1K OHM 1/16W 1% SMD 0402	KOA	RK73H1ETTP3012F	Digikey	RT0402FRE0730K1L- ND
HDK3K-40	1	R55	RES 2.00K OHM 1/16W 1% SMD 0402	KOA	RK73H1ETTP2001F	Digikey	RT0402FRE072KL-ND
HDK3K-41	2	R57, R59	RES 33.0 OHM 1/16W 0.5% 0402 SMD	Susumu	RG1005R-330-D-T10	Digikey	RG10R33.0DTR-ND
HDK3K-42	1	R58	RES 1.50KOHM 1/16W 0.5% 0402 SMD	Susumu	RG1005P-152-D-T10	Digikey	RG10P1.50KDTR-ND
HDK3K-43	2	R60, R63	RES 4.99K OHM 1/16W 0.5% 0402SMD	Susumu	RR0510P-4991-D	Digikey	RR05P4.99KDTR-ND
HDK3K-46	16	R5, R6, R7, R8, R9, R10, R11, R12, R36, R37, R38, R39, R40, R41, R42, R43	RES 1.00K OHM 1/8W 1% 0805 SMD	КОА	RK73h2ATTD1001F	Digikey	311-1.00KCRCT-ND



Switches

HDK3K-47	2	SW1, SW2	SWITCH DIP HALF PITCH 8POS SMD	Grayhill Inc.	97C08ST	Digikey	GH1372-ND
HDK3K-48	1	S1	6MM LIGHT TOUCH SWITCH 160GF	Panasonic	EVQ-PAE04M	Digikey/Arrow	P8008S-ND

Integrated Circuits

HDK3K-49	1	U1	IC CODEC 16BIT 26KSPS 30-TSSOP	TI	TLV320AIC14KIDBTG4	Digikey	296-19635-5-ND
HDK3K-50	1	U2	IC HEX INVERTER 14-SOIC	TI	SN74LVC04ADR	Digikey	296-1218-1-ND
HDK3K-51	1	U3	IC AMBE-3000™ DSP 128-LQFP	DVSI	AMBE-3000F	DVSI	
HDK3K-52	1	U4	IC LINE DRVR/RCVR RS-232 28-SSOP	TI	SN75C3238DBR	Digikey	296-12743-1-ND
HDK3K-53	1	U5	IC 16BIT MCU 32KB FLASH 64-LQFP	TI	MSP430F1471IPM	Digikey	296-15701-ND
HDK3K-54	1	U6	IC LINE DVR/RCVR MULT-CH 20-SSOP	TI	SN65C3222EDBR	Digikey	296-20993-1-ND
HDK3K-55	2	U7, U8	IC LDO REG LOW-IQ 3.3V/ADJ 8SOIC	Maxim Integrated Circuits	MAX604CSA+	Digikey	MAX604CSA+-ND
HDK3K-56	1	U9	IC AUTOSWITCH POWER MUX 8-TSSOP	TI	TPS2112APWR	Digikey/Arrow	296-16937-1-ND
HDK3K-57	1	U10	IC ADJ 500MA LDO REG 8-SOIC	TI	TPS77601D	Digikey/Arrow	296-2777-5-ND
HDK3K-58	1	U11	MOSFET N-CH 100V 170MA SOT-23	Fairchild Semiconductor	BSS123_NL	Digikey/Arrow	BSS123NTR-ND
HDK3K-59	1	U12	IC 2.93V SUPPLY MONITOR SOT23-5	TI	TPS3828-33DBVT	Digikey	296-2638-2-ND
HDK3K-60	1	U13	IC CONV SERIAL-TO-USB 32-LQFP	TI	TUSB3410VF	Digikey	296-12699-ND
HDK3K-61	1	U14 DNP	IC SERIAL EEPROM 128K 2.5V 8SOIC	Microchip Technology	24LC128-I/SN	Digikey	24LC128-I/SN-ND

Crystals and Oscillators

HDK3K-62	1	X1	OSCILLATOR 18.432MHZ 3.3V SMD	Abracon Corporation	ASFL1-18.432MHZ-EK-T	Digikey	535-9257-1-ND
HDK3K-63	1	X2	OSCILLATOR 29.4912 MHZ 1.8V SMD	Abracon Corporation	ASE3-29.4912MHZ-KT	Digikey	535-9552-1-ND
HDK3K-64	1	Y1	CRYSTAL 8.00MHZ 20PF HC-49/US	ECS	ECS-80-20-4X	Digikey	X1094-ND
HDK3K-65	1	Y2	CRYSTAL 12.000 MHZ HC49/US	Citizen	HC49US12.000MABJ-UB	Digikey	300-8492-ND



Accessories

HDK3K-66	1		CABLE MINI-USB A TO MINI-B 1.8M	Assmann Electronics	AK672M/2-2-R	Digikey	AE9929-ND
HDK3K-67	1		XFRMR DESK-TOP 5V 2.5A E-STAR - pwr adaptor	Cui Inc	ETS050250SUDC-P5P-KH	Digikey	T1031-P5P-ND
HDK3K-68			Assembly				
HDK3K-69	1		Handset	Samsung	251401-03	TWACOMM.COM	
HDK3K- 69A	1		Cord for Handset		Black phone Cord TC-4M	Telephone Components	
HDK3K-70	4	Feet	BUMPON X-TALL TAPER SQ .81X.30BK	3M/EMS	SJ-5523 (BLACK)	Digikey	SJ5523-0-ND
HDK3K-71	13	Jumper	Jumper for header			Jameco	22024