

Application part	Main PCB	Model NAC-5000			Unit	mm
		Main B/D			Scale	N/S
		-			General Tolerance	±0.1
NO	A		Symbol & Reference			
1	81	EC1-0001L	BC1,BC4,BC7,BC10,BC11,BC12,BC13,BC14,BC15,BC16,BC17,BC18,BC19,BC20,BC21,BC22,BC23,BC24,C25,B C25,C26,BC26,BC27,BC28,C29,BC29,BC30,BC33,C34,BC34,BC35,BC36,B C37,BC38,BC39,BC40,BC41,BC42,B C43,BC44,BC45,BC46,BC47,BC48,B C49,BC50,BC51,BC52,BC53,BC56,B C57,BC58,BC59,BC60,BC61,BC62,B C63,BC64,BC65,BC66,BC67,BC68,B C69,BC70,BC71,BC72,BC73,BC74,B C75,BC76,BC77,BC78,BC79,C80,BC 81,C82,BC82,BC83,BC84,BC85,C90	CERAMIC CAPACITOR	1uF,16V, ±10%,S1608	
2	11		BC2,BC3,BC5,BC6,BC8,BC9,C39,C4 8,C69,C70,C71	CERAMIC CAPACITOR	18pF,16V, ±20%,S1005	
3	3		BC31,BC32,C83	CERAMIC CAPACITOR	4.7uF,16V, ±20%,S2012	
4			R5,C7,C8,R9,C11,C12,R18,R19,C30, C35,C42,R43,C43,R44,C44,C50,C54, BC54,C55,BC55,C63,C64,R65,R66,R 86,R96,R102,C103,C104,C105,C106, R137,R147,J18, C58,C59,C108,C97,R164		NC	
5	30		C1,C2,C6,C9,C10,C13,C15,C17,C18, C37,C56,C57,C60,C65,C67,C68,C73, C74,C75,C76,C77,C78,C79,BC80,C8 5,C93,C96,C107,C109,C110	CERAMIC CAPACITOR	0.1UF,16V, ±20%,S1005	
6	12		BL1,BL2,BL3,BL4,BL5,BL7,BL34,BL3 5,BL41,BL42,BL43,BL44	FERRITE BEAD-CERATEC	HB-1M1005-221JT (1005)	
7	34	EE4-0003A	BL6,BL8,BL9,BL10,BL11,BL12,BL13, BL14,BL15,BL16,BL17,BL18,BL19,BL 20,BL21,BL22,BL23,BL24,BL25,BL26, BL27,BL28,BL29,BL30,BL31,BL32,BL 33,BL36,BL37,BL38,BL39, BL40, BL45, BL46	FERRITE BEAD-TDK	MPZ2012-S221A	
8	1	EP2-0004A	BT1	BATTERY-MAXCELL	CR2032(3V)	
9	8	EC1-0008A	C3,C14,C16,C31,C32,C33,C40,C41	CERAMIC CAPACITOR	2.2uF,16V,20%,S2012	
10	1		C19	CERAMIC CAPACITOR	10nF,50V, ±20%,S1005	
11	4		C20,C21,C27,C51	CERAMIC CAPACITOR	0.1uF,25V, ±20%,S1005	
12	2		C22,C23	CERAMIC CAPACITOR	4.7uF,50V, ±20%,S3225	
13	1		C24	CERAMIC CAPACITOR	5.6nF,50V, ±20%,S1005	
14	2	EC3-0002B	C28,C49	TANTAL CAPACITOR	47uF,20V, ±20%,S7343	
15	3	EC1-0001N	C36,C38,C47	CERAMIC CAPACITOR	10uF,16V, ±20%,S3216	
16	1		C45	CERAMIC CAPACITOR	22nF,25V, ±20%,S1005	
17	1		C46	CERAMIC CAPACITOR	4.7nF,50V, ±20%,S1005	
18	4		C98,C99,C100,C101	CERAMIC CAPACITOR	15pF,16V,, ±20%,S1005	
19	6		C52,C53,C61,C62,C81,C84	CERAMIC CAPACITOR	22pF,50V, ±20%,S1005	
20	1	EC3-0010A	C66	ELECTRO CAPACITOR	220uF,16V, ±20%S 8 - RUBYCON	
21	1		C72	CERAMIC CAPACITOR	0.1UF/2KV, F103Z 2Kv Qd	
22	5	EC3-0006B	C86,C88,C91,C92,C94	ELECTRO CAPACITOR	10uF,16V, ±20%,S 4	
23	1	EC3-0006A	C87	ELECTRO CAPACITOR	1uF,50V±20%,S 4	
24	3	EC3-0007A	C4,C5,C89	ELECTRO CAPACITOR	22uF,50V±20%S 6.3	
25	2	EC3-0008A	C95, C102	ELECTRO CAPACITOR	0.1uF,50V, ±20,S 4	
	4		C111,C112,C113,C114	CERAMIC CAPACITOR	33pF,50V,, ±20%,S1005	
26	8	ED1-0002B	D1,D2,D3,D4,D5,D6,D12,D13	DIODE-DEC	SS210 (SMA)	
27	13	ED1-0001A	D7,D8,D9,D10,D11,D14,D15,D16,D1 7,D18,D19,D20,D21	DIODE-DEC	LL4148,CHIP3415	
28	3		JP1,JP2,JP3	JUMPER PIN	JUMPER 2MM (2PIN)	
29	1		J1	CONNECTOR	USB-103 (USB A R/A)	
30	1	EN2-0033C	J2	CONNECTOR	USB-202 (USB A 2PORT R/A)	
31	1	EN2-0033B	J3	CONNECTOR	USB-112 (MINI USB B DIP 5PIN)-SMD type	
32	1	EN2-0035A	J4	CONNECTOR	MOLEX 2P 53258-0229	
33	2		J5,J8	CONNECTOR	YMW025-06R ()	
34	1	EN2-0001H	J6	CONNECTOR	MOLEX 9P 1.25MM (53047-0910)	
35	1	EN2-0009D	J16	CONNECTOR	MOLEX 2P 1.25MM (53398-0271)	
36	3	EN2-0030A	J9,J14,J20	CONNECTOR	MOLEX 3P 1.25MM (53398-0371)	
37	3	EN2-0030H	J10,J11,J12 - -	CONNECTOR	MOLEX 20P 0.5MM (52559-2070)	

38	1	EN2-0038K	J13	CONNECTOR	05003HR-40B02S(G)
39	1		J15	CONNECTOR	10027HR-04C (Right Angle Bottom)
40	3	EN2-0038J	J7,J17,J19	CONNECTOR	12505WS-04(P)
41	2	EL5-0003A	K1,K2	RELAY-NAIS	DS1E-M-DC5V
42	1		L1	INDUCTOR	SHP1035P-F330A
43	1		L2	INDUCTOR	SHP0520P-F4R7A
44	1		L3	INDUCTOR	SHP0735P-F330A
45	1	EE4-0013A	L5	COMMON FILTER_TDK	ACM7060-701-2PL
46	2	EQ1-0005A	Q1,Q2	SWITCHING TR-KEC	KRC106S
47	2	EQ1-0004B	Q3,Q4	SWITCHINGTR	MMBT2369LT1G
48	1	ER3-0002K	RA1	ARRAY RESISTOR	10K ,±5%,MNR14
49	2		RV1,RV2	VARISTOR	SVR390D10B-dip
50	5	ER5-0002A	RV3,RV4,RV5,RV6,RV7	VARISTOR-SFI	SFI0603 (1608)
51	6	ER2-0007A	R1,R2,R3,R4,R7,R8	RESISTOR	0 ,±5%,S2012
52	18		R6,R32,R33,R35,R36,R39,R113,R119 ,R125,R126,R127,R128,R129,R130,R 131,R132,R134,R135	RESISTOR	3.3K ,±5%,S1005
53	4		R10,R59,R75,R97	RESISTOR	10K ,±5%,S1005
54	26		R11,R12,R13,R14,R16,R20,R25,R26, R45,R47,R48,R49,R53,R58,R60,R61, R67,R89,R90,R100,R101,R103,R104, R105,R106,R148	RESISTOR	0 ,±5%,S1005
55	12		R15,R21,R22,R23,R24,R87,R92,R111 ,R112,R121,R122,R140	RESISTOR	1K ,±5%,S1005
56	4		R27,R28,R38,R136	RESISTOR	100 ,±5%,S1005
57	2		R29,R95	RESISTOR	15K ,±5%,S1005
58	1		R30	RESISTOR	30.9K ,±1%,S1005
59	2		R31,R42	RESISTOR	10K ,±1%,S1005
60	1		R34	RESISTOR	470K ,±5%,S1005
61	1		R37	RESISTOR	150K ,±5%,S1005
62	1		R40	RESISTOR	2.49K ,±5%,S1005
63	1		R41	RESISTOR	1.2K ,±1%,S1005
64	3		R46,R50,R99	RESISTOR	49.9K ,±5%,S1005
65	2		R51,R52	RESISTOR	2K ,±5%,S1005
66	7		R54,R55,R56,R57,R98,R162,R163	RESISTOR	10 ,±5%,S1005
67	1		R62	RESISTOR	40.2 ,±1%,S1005
68	1		R63	RESISTOR	4.9K ,±5%,S1005
69	2		R64,R78	RESISTOR	1.5K ,±5%,S1005
70	3		R68,R69,R84	RESISTOR	510 ,±5%,S1005
71	4		R70,R71,R72,R73	RESISTOR	49.9 ,±5%,S1005
72	20		R74,R138,R139,R144,R145,R146,R14 9,R150,R151,R152,R153,R154,R155, R156,R157,R158,R159,R160,R161,R1 7	RESISTOR	22 ,±5%,S1005
73	1		R76	RESISTOR	6.8K ,±1%,S1005
74	2		R77, R141	RESISTOR	75 ,±1%,S1005
75	14	ER2-0009B	R79,R81,R82,R83,R85,R107,R108,R1 16,R117,R133,R142,R143,R165, R166	RESISTOR	4.7K ,±5%,S1005
76	1		R80	RESISTOR	120 ,±5%,S1005
77	4		R109,R110,R118,R120	RESISTOR	560 ,±5%,S1005
78	4		R114,R115,R123,R124	RESISTOR	1M ,±5%,S1005
79	4	ER3-0002C	RA2,RA3,RA4,RA5	ARRAY RESISTOR	22 ,±5%,MNR14
80	1	EW1-0003A	SW1	TACT SWITCH	CTS-1104D
81	2	EU8-0035A	U1,U6	POWER SWITCH	TPS2082DG4
82	3		U2,U3,U4	MULTIPLEXER	SN74HC257PW (TSSOP)
83	1	EU9-0009A	U5	TRANCEIVERS	74LVX3245MTCX (TSSOP)
84	1		U7	POWER IC	MP1593DN-LF-Z
85	1	EU8-0033A	U8	VOLTAGE REGULATOR	XC6209F332MR
86	1		U9	VOLTAGE REGULATOR	XC6209F182MR
87	1		U10	VOLTAGE REGULATOR	XC6210B182MR
88	1		U11	VOLTAGE REGULATOR	XC9223B081AR
89	1		U12	VOLTAGE REGULATOR	XC6210B142MR
90	1	EU8-0032A	U13	POWER IC	MP1591-DS-Z
91	1	EU1-0018A	U14	CPU-MARBELL	PXA300 624MHz, 13m*13m NAND(large block) 8bit type
92	2		U15, U30	X-TAL	32.768KHz, SMD Type, CM200S,32C7Y
93	1		U16	X-TAL	13MHz, KX53104, ±20 (sx-8)
94	2	EU3-0019A	U17,U19	MOBILE DDR SDRAM	K4X51163PE-FGC3 (Mobile DDR 512MB)
95	1	EU3-0020A	U18	NAND FLASH	K9F1G08U0B-PCB0 (128M*8)
96	1		U20	X-TAL	25MHz, KX53104, ±20 (sx-8), 18pf
97	1	EU1-0020A	U21	ETHERNET CONTROLLER	DM9000BEP
98	1	EN1-0007A	U22	CONNECTOR	51F-1201GYD2 (RJ45)
99	1	EU3-0009B	U23	EEPROM	AT93C46-10SU-2.7
100	1	EU9-0007A	U24	RS-232 TRANCEIVERS	ZT3232LEEY-TSSOP
101	1	EU9-0006A	U25	USB TRANCEIVERS	ISP1105BS
102	1	EU9-0008A	U26	RS-485 TRANCEIVERS	ZT3485LEEN - 8pin soic
103	1	EU4-0007A	U27	CMOC IC	SN74HC08PWR_TSSOP
104	1	EU5-0004B	U28	RTC	DS1302Z+
105	1	EU8-0024B	U29	RESET IC	EM6323LXSP5B-2.9+
106	1	EU8-0039A	U31	D/A Converter_CIRRUS LOGIC	CS4344-CZZ
107	1	EU8-0019A	U32	OP AMP	LM386MM-1
108	1	EU1-0019A	U33	TOUCH SCREEN CONTROLLER	ADS7846E (SSOP-16pin)_TI
109	6	EU8-0018A	U34,U35,U36,U37,U38,U39	PHOTO COUPLER	SPC-817M
110	1		F1	POLYSWITCH	RUEF300 (DIP) (20AWG)
111	1		U40	CMOSIC	74HC126D (SO14)

Parts List

제 품 명 : 125KHz HID Reader
 모 델 명 : VIRDI-RF32B(Nitgen)
 총 매 수 : 3매 [표지포함]

H/W Version: V1.0
 F/W Version: V1.0

(주)유니온커뮤니티
 기술연구소
 2009.02.09

결 재	담 당	검 토	승 인

(주)유니온커뮤니티				계 품 명	125KHz HID Reader	Parts List					문서번호	URH-PL-RF32B-V10								
																	모 델 명	VIRDI-RF32B(Nitgen)	날짜	2009년 2월 9일
대	중	NO	부품번호 [Reference Name]	Code No.	품명 [Part Name]	규격 [Part Number]	Package	수량	단위	U.Price	Price	Maker/Vendor	담당자/연락처	RoHS	비고					
RF32B Main Board Assembly																				
Main Board SMD Ass'y Parts																				
PCB																				
	1	**Main Board			PCB RF32B Main FR4 2L 1.6T GR 금도금		PRF32BMA01 V10				1	EA			J&K	O				
IC																				
	2	U651		YSB1040000	IC Micom 8bit RISC		ATMEGA8L-8AU		TQFP32	1	EA				ATMEL	O				
	3	U652		YSB6040250	HID eProx MCM		4025A0105		SMD	1	EA				HID	O				
	4	U653		YSB5032320	IC RS232 Transceiver TSSOP16		SP3232ECY-L/TR MAX3232ECAC		TSSOP16	1	EA				SIPEX MAXIM	O △				
Transistor & FET																				
	5	Q681,682		YSC0022220	TR NPN Transistor Ic600mA Vcb75V SOT23		KTN2222AS-RTK/P KST2222A MMBT2222AL		SOT23	2	EA				KEC FAIRCHILD ONSEMI	O △ △				
Diode & LED																				
	6	LD680,681		YSD1300100	CHIP LED G(1608)		LTST-C190GKT		1608SMD	2	EA				LITEON	O				
	7	D681~683		YSD0041480	Diode Switching 150mA MiniMelf(SOD-80C)		LL4148		MiniMelf	3	EA				DEC/ROHM General semi Vishay	O △ △				
Chip Ceramic Capacitor																				
	8	C681,682		YSE7015060	MLCC 1608 15pF (J) NPO		C0603JRNPO9BN150		1608SMD	2	EA				Phycomp	O				
	9	C683		YSE1139060	MLCC 1608 390pF(J) 50V		CL10C391JBNC GRM1880G1H391J 0603N391J500LT		1608SMD	1	EA				SAMSUNG MURATA WALSIN	O				
	10	C686		YSE2215060	MLCC 2012 1.5nF(J) 50V		CL21C152JBNC GRM2180G1H152J 0805N152J500LT		2012SMD	1	EA				SAMSUNG MURATA WALSIN	O				
	11	DC680,681,683~691		YSE1410090	MLCC 1608 0.1uF(Z) 50V		CL10F104ZB8NNNC GRM188F51H104Z 0603F104Z500LT		1608SMD	11	EA				SAMSUNG MURATA WALSIN	O △ △				
Tantal Capacitor																				
	12	TC680,682,683		YSG6100161	TANTAL 10uF/16V A 3216		TAJA106M(K)016RNJ 293D106X0016A2TER TCSCS1C106M(K)AAR		A 3216	3	EA				AVX VISHAY 삼성전기	△ △ △				
Chip Resistor																				
	13	R697,698		YSI1000060	Resistor 1608 5% 0Ω		RC1608J000CS MCR03EZPJ000 WR06X000JTL		1608SMD	2	EA				삼성전기 ROHM WALSIN	O △ △				
	14	R688		YSI1110060	Resistor 1608 5% 100Ω		RC1608J101CS MCR03EZPJ101 WR06X101JTL		1608SMD	1	EA				삼성전기 ROHM WALSIN	O △ △				
	15	R686,689		YSI1133060	Resistor 1608 5% 330Ω		RC1608J331CS MCR03EZPJ331 WR06X331JTL		1608SMD	2	EA				삼성전기 ROHM WALSIN	O △ △				
	16	R685,687,691~696		YSI1247060	Resistor 1608 5% 4.7KΩ		RC1608J472CS MCR03EZPJ472 WR06X472JTL		1608SMD	8	EA				삼성전기 ROHM WALSIN	O △ △				
	17	R690		YSI1410060	Resistor 1608 5% 100KΩ		RC1608J104CS MCR03EZPJ104 WR06X104JTL		1608SMD	1	EA				삼성전기 ROHM WALSIN	O △ △				
	18	R699		YSI1510060	Resistor 1608 5% 1MΩ		RC1608J105CS MCR03EZPJ105 WR06X105JTL		1608SMD	1	EA				삼성전기 ROHM WALSIN	O △ △				
Inductor																				
	19	LB651,652		YSK1030000	Coil Ferrite Bead 1608 30Ω		HB-1S1608-300JT CIM10P300NE		1608SMD	2	EA				CERATECH 삼성전기	O △				

(주)유니온커뮤니티				계 품 명	125KHz HID Reader	Parts List					문서번호	URH-PL-RF32B-V10				
				모 델 명	VIRDI-RF32B(Nitgen)						날짜	2009년 2월 9일				
				적 용 시 기	양산						중 Page	3매 [표지포함]				
대	중	NO	부품번호 [Reference Name]	Code No.	품명 [Part Name]	규격 [Part Number]	Package	수량	단위	U.Price	Price	Maker/Vendor	담당자/연락처	RoHS	비고	
			Crystal													
		20	X681		Crystal 8MHz SX8	8MHz 18pF SX8	SX-8	1	EA			남경/Protech		O		
			Connector													
		21	J651	YSU5326103	Con Wafer 3pin 1.25mm pitch Angle SMD	53261-0371	SMD	1	EA			MOLEX		O		
		22	J654	YSU5326104	Con Wafer 4pin 1.25mm pitch Angle SMD	53261-0471	SMD	1	EA			MOLEX		O		
			Main Board Manual Ass'y Parts													
			Connector													
		23	J652	YTU1224106	Con 20Header 6p Single 사출2mm Pin3/4mm	200H0234-06S	DIP	1	EA			대원전자/CRS		O		
			SUB Total		RF32B Main Board Assembly			50	EA							
RF32B Total Assembly																
			Total Ass'y Parts													
			Antenna													
		24	**RF Antenna		Antenna 125KHz RF 24x39, 1.04mH, 100mm	ANT(24*39) 흰색띠 (1.04mH), 100mm		1	EA			씨앤씨테크		O		
			SUB Total		RF32B Total Assembly			1	EA							
Grand Total								51	EA							