7Inch version

LCD DC-DC

R1 4.7k   R2 15k   +LCD_3V3
L1 10uH
+12   C1 100n
4.7uF 16V C2
U2
A PAD
EN GND
VFB SW
GND SYN
ST1S10
L2 3.3uH
C4 100n   22uF 10V C3
GND

U1
1 NC
2 GND
3 D0
4 D1
5 D2
6 D3
7 D4
8 D5
9 D6
10 D7
11 D8
12 D9
13 D10
14 D11
15 D12
16 D13
17 D14
18 D15
19 CS
20 RS
21 WR
22 RD
23 RST
24 NC
25 3V3
26 PS
27 NC
28 INT
29 WAIT
30 T_INT
31 T_SDA
32 T_SCL
33 3V3
34 GND
LCD-RA8875

GND +LCD_3V3

J1
1 CS 3v3 25
2 RS 3v3 26
3 WR GND 27
4 RD GND 28
5 RS MISO 29 MISO
6 DB0 MOSI 30 MOSI
7 DB1 WRX 31
8 DB2 WTX 32
9 DB3 CLK 33 CLK
10 DB4 DCS 34 SD_CS
11 DB5 AD1 C 35 AD1_CS
12 DB6 AD2 C 36 T_SDA
13 DB7 E2A 37 E2A
14 DB8 E2B 38 E2B
15 DB9 E2S 39 T_INT
16 DB10 E1A 40 E1A
17 DB11 E1B 41 E1B
18 DB12 A3 C 42 T_SCL
19 DB13 5v 43
20 DB14 GND 44
21 DB15 GND 45 +5 GND
22 PONCAS 46
23 PHOCAS 47
24 3v3
FPC-45P-0.5mm
CPU_PW_ON
CPU_PW_HOLD
+3V3

ESP-1
1 GND
2 GPIO2
3 GPIO0
4 URXD
5 UTXD
6 CH_PD
7 GPIO16
8 VCC
GND +3V3

U3
16 Vdd CH0 1
15 Vref CH1 2
14 GND CH2 3 PTT_SW1
13 CLK CH3 4 PTT_SW2
12 Dout CH4 5
11 Din CH5 6
10 CS CH6 7
9 GND CH7 8
MCP3008-I/SL

+3V3 R6 AF GAIN 1k   +3V3 R7 SHIFT 1k
GND

R8 4.7k   R10 4.7k   R11 4.7k   R9 4.7k
+3V3   +3V3   +3V3   +3V3
R13 1k S2   R12 1k S3   R14 1k S4   R15 1k S5
GND GND GND GND
R18 2k S6   R17 2k S7   R19 2k S8   R20 2k S9
GND GND GND GND
R22 4.7k S10   R21 4.7k S11   R23 4.7k S12   R24 4.7k
GND GND GND GND
ENC2_SW

POWER SWITCH+FILTER

IN1 13.8V
F1 RUEF400   VCC12_IN +12
T1 LCP
D1 SM6T15A   PSG
LCG1 BNX016-01
C5 1000uF   C6 1uF   C7 100n   C8 1n   C9 470pF   C10 120pF
GND
F2 MF-MSMF110_16-2
MOTHERBOARD1 13.8V
RF-UNIT1 13.8V

VCC12_IN
R3 30k   R4 30k
Q1 IRFR9024NPBF
D2 1n4148w   +12
CPU_PW_HOLD   Q2 BSS123   D3 1n4148w   CPU_PW_ON
R5 30k   C11 8.2n
GND   GND
S1 GND
PWR

X2
Конт.	Цепь
1	
2	
3	
4	
5	
6	
J3 J4 J5   MIC
GND

TANGENT

R16 100   PTT   PTT_OUT1
C12 0.1

X1
Цепь	Конт.
	1
	2
	3
	4
	5
	6
PTT
MIC   MIC_OUT1
+5
R25 47k +3V3   U4 MCP6001UT   PTT_SW1
R26 47k +3V3   U5 MCP6001UT   PTT_SW2

TANGENT->TRX
YAESU MH-36
1 - 6
2 - NC
3 - 4
4 - 3
5 - 2
6 - 5

YAESU MH-48
1 - 6
2 - 5
3 - 4
4 - 3
5 - 2
6 - 1
MIC Jack

J2 MicroSD
1 DAT2   DAT1 8
2 CD/DAT3   MP1 MP1
3 CMD   MP2 MP2
4 VDD   MP3 MP3
5 CLK   MP4 MP4
6 VSS   MP5 MP5
7 DAT0   MP6 MP6
DM3AT-SF-PEJM5

R27 0   R28 0   R29 0
R30 3.3k   R31 3.3k   R32 3.3k
GND   GND
C15 100n   C13 22uF
GND   +3V3

+3V3
R33 4.7k   R34 4.7k
GND
ENC1
C
B
A
PEC12
ENC2_SW 2
GND

C14 100n
C16 100n
GND
C17 10n
C18 10n
GND
C17, C18 - optional

ENCODER_MAIN1
GND
+5

Comment	Description	Designator	Footprint	LibRef	Quantity	LCSC Part #
100n	CAP_0805	C1, C4, C14, C15, C1	CAP_0805	CAP_0805	5	
4.7uF 16V	CAPAE_6.6x6.6h5.4	C2	CAPAE-6.6x6.6h5.4	CAPAE_6.6x6.6h5.4	1	
22uF 10V	CAPAE_4.3x4.3h5.4	C3	TC_1411	CAPAE_4.3x4.3h5.4	1	
1000uF	CAP250RP	C5	CAPPR-6.35/8.9	CAP250RP	1	
1uF	CAP_1206	C6	CAP_1206	CAP_1206	1	
100n	CAP_1206	C7	CAP_1206	CAP_1206	1	
1n	CAP_1206	C8	CAP_1206	CAP_1206	1	
470pF	CAP_1206	C9	CAP_1206	CAP_1206	1	
120pF	CAP_1206	C10	CAP_1206	CAP_1206	1	
8.2n	CAP_1206	C11	CAPC2013X94X50LL	CMP-2007-04444-1	1	
0.1		C12	CH0805C	Capacitor	1	
22uF	EEEFC_sizeB	C13	TC_1411	EEEFC_sizeB	1	
10n	CAP_0805	C17, C18	CAP_0805	CAP_0805	2	
SM6T15A	Diode	D1	SMBJ36CATR	SM6T15A	1	
1n4148w	Diode	D2, D3	SOD3716X135N	1n4148w	2	
PEC12	PEC12	ENC1	PEC12	PEC12	1	
OPTICAL ENCODER	OPTICAL ENCODER	ENCODER_MAIN1	644456-4	644456-4	1	
ESP-01 ESP8266	ESP-01 ESP8266	ESP-1	ESP-01 ESP8266	ESP-01 ESP8266	1	
RUEF400	Fuse	F1	RUEF400	RUEF400	1	
MF-MSMF110_16-2	Fuse	F2	FUSC4632X85N	MF-MSMF110_16-2	1	
JX2	JX2	IN1, MOTHERBOAR	JX2	JX2	3	
FPC-45P-0.5mm	Connector	J1	FH12S45S05SH60	FH12S-45S-0.5SH_5	1	
DM3AT-SF-PEJM5	Connector	J2	DM3ATSFPEJM5	DM3AT-SF-PEJM5	1	
PJ-3,5		J3, J4, J5	Audio-PJ-392	PJ-3,5	3	
10uH	Inductor	L1	B82464Z4	IND_FERRITE_CORE	1	
3.3uH	IND_1812	L2	IND_1812	IND_1812	1	
MIC_OUT	51022-0200	MIC_OUT1	51022-0200	51022-0200	1	
PTT_OUT	51022-0200	PTT_OUT1	51022-0200	51022-0200	1	
IRFR9024NPBF	IRFR9024NPBF, Tpa	Q1	ONSC-DPAK-3-369C-	CMP-1058-00387-1	1	
BSS123	N-Channel Logic Lev	Q2	FAIR-SOT23-3_V	CMP-2000-04934-1	1	
4.7k	RES_0805	R1, R8, R9, R10, R11	RES_0805	RES_0805	11	
120k + 100k	RES_0805	R2	RES_0805	RES_0805	1	
30k	RES_0805	R3, R4, R5	RESC2013X60X40NL	CMP-2001-00626-1	3	
ptv09a-4225f-b102	Adjustable Resistor P	R6, R7	PTV09	PTV09	2	
1k	RES_0805	R12, R13, R14, R15	RES_0805	RES_0805	4	
100		R16	CH0805R	Resistor	1	
2k	RES_0805	R17, R18, R19, R20	RES_0805	RES_0805	4	
47k		R25	CH0805R	Resistor	1	
47k		R26	CH0805C	Resistor	1	
0	RES_0805	R27, R28, R29	RES_0805	RES_0805	3	
3.3k	RES_0805	R30, R31, R32	RES_0805	RES_0805	3	
PTS645SK50LFS	PTS645SK50LFS	S1, S2, S3, S4, S5, S	PTS-6-S	PTS645SK50LFS	12	[NoParam], test
BNX016-01	BNX016-01	T1	TRANSF_ICORE	TRANSF_ICORE	1	
LCD-RA8875	LCD-RA8875	U1	LCD-RA8875	LCD-RA8875	1	
ST1S10	ST1S10	U2	ST1S10	ST1S10	1	
MCP3008-I/SL	MCP3008-I/SL	U3	MCP3008-I/SL	MCP3008-I/SL	1	
MCP6001UT		U4, U5	SOT23-5	MCP6001UT_1	2	
PTT		X1, X2	CON: PLS-6	6-Connector	2	