

SORTED PARTS LIST (BOM) FOR VK3PE & C.S. PCB PANEL ONLY

please note: This list includes any and all parts which may be alternatives or optional !

THIS IS NOT A COMPLETE LIST OF STAR PARTS. IT IS ONLY FOR THE PCB'S AS LISTED IN THE LEFT HAND COLUMN.

History:

- 27-09-07 create corrected C43 type was ceramic, now smd
- 9/30/2007 corrected U310 to "J310" transistors, also TR1 was MPF102, should be J310
- 9/30/2007 all 1uF caps are same type, smd "ACASE" which is the smallest smd type of cap. There is also one 1uF tantalum leaded cap on the 20W PA board.
- 9/30/2007 1mH choke description/footerprint corrected
- 9/30/2007 0806 should be 0805
- 9/30/2007 PinMIX notes added at end of this list
- 01-0-10-07 Farnell # added for 10k NTC (Butler) & Relays for DDS Filter Possible alternate Altronics (VK) cat # S 4113 relay
- 01-0-10-07 C29,30,31 fitting clarified for 20W PA board
- 01-0-10-07 Matrix/audio pcb: R7 & R11 should be 22k, R8 & R10 should be 270k Corrected below.
- 01-0-10-07 TR103 on Butler heater should be TIP122 not TIP123
- 01-0-10-07 PICnMIX displays:- refer to original STAR article for part specified. ie. Maplin FA01B (Green) or BY66W (Red)

PCB has pinout for DISPLAYS from Farnell in particular the type HDSP-xxx type.
Maplin Common Anode displays BY66W have same pinout as the HDSP-xxxx used here: FA01B is discontinued

PICnMIX Keypad:- the Maplin JM09K is NOT pin directly compatible with this PCB . A cable is needed.

The Maplin and it seems many others, are also WIDER than the one used for the PCB.

At this time, the only Keypad I know that will fit without having to bend the STATUS LED's away from the keypad is one available from www.jaycar.com.au in Australia. Catalogue number SP0770 (AU\$7.30 one off)

It does not plug directly into the PCB though. A short cable will have to be made.



01-0-10-07 J2 connector on Timer board is 10 pin, not 9 pin.

10/3/2007 **sort on description**

10/4/2007 clarify capacitor ratings etc

10/9/2007 from CS gp changed caps description to be consistent

10/10/2007 Relays for DDS Filter, Altronics S4113 is cheaper and has correct pinout. For VK buyers

10/10/2007 text re Keypads expanded and picture added

10/11/2007 all specified feed through caps now shown

10/16/2007 minor update not affecting component values

10/19/2007 C15 on PnM should be 10nF (was 47pF)

10/22/2007 **Displays on the PnM:** removed reference to the HDSP-K121 high efficiency/low current types as standard types should be Ok

Last updated on 9th Nov 2007

10/24/2007 eg. Farnell 100-3314 (red) or 100-3316 (Green)
 10/26/2007 RF parts URL added with prices for 20W PA transistors. NOTE US\$25 min order and beware postage costs
 10/31/2007 **R2X should be a AXIAL type resistor. For fitting details please see the www.carnut.info/star-parts/glennpcbs.htm page.**
On the DSP M'bd, make sure you get the wide SOIC type of MAX232. Typical part number is MAX232EWE or CSE

IC24A no effect here on BOM but please note correct fitting of LM317 on the web page for Codec if IC24 not used..
 Preferable to use the DIP version of 24L256 in a socket.
 C2 (100nF) was shown as on Butler PCB, now on PnM Control PCB
 added voltage rating for electro caps that were not rated (on MR, Timer and matrix/amp)
 10th Nov 2007 TLC7524VD CORRECTED TO TLC7524CD (In VK Rockbies have them but check brand is Texas first)
 Clarify pin count for male headers in "Part Type" column. **NOTE these headers are normally bought as a 40 pin row and snapped to required length**
 Polyethylene trim caps use the ~8mm diameter type, NOT the 10mm ones.

Check Web pages also for updates:- <http://www.carnut.info/star-parts/glennpcbs.htm>

"1206-0805" means that either a 1206 OR a 0805 part can be fitted.

Used On	Part type	Ref #	Footprint	Description	Notes
Timer	DIP SWITCH 8 way	S1	DIP-16	8 way dip switch	
PnM Control	3 x 4 Keypad			Various types available and pinouts vary!! See notes at end.	Futurlec have a similar part
PnM Butler	PCB stock to surround the Butler oscillator.			The Butler PCB has exposed area for soldering the PCB shielding.	
PnM Butler	DIP socket 28 pin	DDS1	DIP28	DIP 28 IC socket to take DDS carrier PCB	
Timer	Header 0.1" x 10 pin	J2	SIP-10	header male type single row 0.1"	Integration to other boards
DSP M'board	Header 0.1" x 12 pin	JP1X	SIP12	header male type single row 0.1"	OPTIONAL TO CONNECT TO IF BOARD
DSP M'board	Header 0.1" x 16 pin	PL/SK7	SIP16	header male type single row 0.1"	hskt
Matrix/Amp	header 0.1" x 18 pin	JK501	SIP18	header male type single row 0.1" 18 pin	hskt
Matrix/Amp	Header 0.1" x 10 pin	NONE	SIP10	header male type single row 0.1"	hskt
PnM Control	header 0.1" x 18 pin	JK1	SIP18	header male type single row 0.1"	hskt
DSP M'board	Header 0.1" x 2 pin	PL/SK8B	SIP2	header male type single row 0.1"	hskt
DSP M'board	Header 0.1" x 3 pin	PL/SK5a	sip 3	header male type single row 0.1"	hskt
DSP M'board	Header 0.1" x 3 pin	PL/SK5b	sip 3	header male type single row 0.1"	hskt
DSP M'board	Header 0.1" x 3 pin	PL/SK5IN	sip 3	header male type single row 0.1"	hskt
DSP M'board	Header 0.1" x 3 pin	PL/SK5OL	sip 3	header male type single row 0.1"	hskt
DSP M'board	Header 0.1" x 7 pin	PL/SK8A	SIP7	header male type single row 0.1"	hskt
Matrix/Amp	Header 0.1" x 8 pin	JP501	SIP8	header male type single row 0.1"	hskt
Matrix/Amp	Header 0.1" x 4 pin	JP502	SIP4	header male type single row 0.1"	hskt
Matrix/Amp	Header 0.1" x 8 pin	JP503	SIP8	header male type single row 0.1"	hskt

PnM But/Opto	Header 0.1" x 4 pin	J5	SIP4	header male type single row 0.1"	hskt	Integration to PnM Control
PnM Butler	Header 0.1" x 4 pin	J4	SIP4	header male type single row 0.1"	hskt	Integration DDS ctrl to PnM Control bd
PnM Control	Header 0.1" x 8 pin	J_STATUS	8 sip8	header male type single row 0.1"	hskt	OPTN FOR EXTERNAL STATUS LEADS
PnM Control	Header 0.1" x 4 pin	J1	SIP-4	header male type single row 0.1"	hskt	PIC program port for S meter
PnM Control	Header 0.1" x 4 pin	J3	SIP4	header male type single row 0.1"	hskt	Integration DC in etc for PnM control
PnM Control	Header 0.1" x 4 pin	J6	SIP-4	header male type single row 0.1"	hskt	OPTN FOR EXTERNAL S Meter
PnM Control	Header 0.1" x 8 pin	JP1	SIP8	header male type single row 0.1"	hskt	Integration to DDS & Opto
PnM Control	Header 0.1" x 4 pin	SK3	SIP4	header male type single row 0.1"	hskt	PIC program port for Control
Timer	Header 0.1" x 4 pin	J1	SIP-4	header male type single row 0.1"	hskt	PIC program port for Timer
DSP M'board	Header 0.1" x 50 pin	SK8	HEADER25X2	header male type dual row 0.1"	hskt	CAN FIT ONLY ACTIVE PINS TO REDUCE
PnM Control	Header 3 pin x 0.1" male	SK2	SIP 3	header male type single row 0.1"	hskt	Integration for serial control interface
DDS Assy	PCB Pins	CARRIER	DIP28	pcb has large holes for turned pins from IC skt	hskt	USE PINS REMOVED FROM TURNED SKT
DSP board	Socket 0.1" x 16	PL/SK7	SIP16	16 pin SINGLE ROW SOCKET 0.1" pitch	hskt	
DSP board	socket 0.1" x 50	SK8	HEADER 25X2	50 PIN DUAL ROW SOCKET 0.1" x 0.1"	hskt	not all pins used so can fit shorter type
Codec board	socket 2x 0.1"	PL/SK6B	SIP2	2 PIN SOCKET SINGLE ROW 0.1"	hskt	
Codec board	socket 3x 0.1"	PL/SK5A	sip 3	3 PIN SOCKET SINGLE ROW 0.1"	hskt	
Codec board	socket 3x 0.1"	PL/SK5B	sip 3	3 PIN SOCKET SINGLE ROW 0.1"	hskt	
Codec board	Socket 7PIN x 0.1"	PL/SK6A	SIP7	7 PIN SOCKET SINGLE ROW 0.1"	hskt	
PnM Control	Socket 7PIN x 0.1"	JK3	SIP7	header 0.1" pitch SOCKET (see Keypad at end)	hskt	OPTION if Keypad is compatible
DSP M'board	SW-DPST	SW2		PCB MTG PRESS BUTTON SWITCH TO SUIT PCB	hskt	Bourns type 7906h-001-000 (Farnell #535- hspc
DSP M'board	SW-DPST	SW3		PCB MTG PRESS BUTTON SWITCH TO SUIT PCB	hskt	Bourns type 7906h-001-000 (Farnell #535- hspc
20W PA	100nF	C1	1206-0805	Capacitor 1206 or 0805 SMD	pcpc	
20W PA	100nF	C10	1206-0805	Capacitor 1206 or 0805 SMD	pcpc	
20W PA	100nF	C12	1206-0805	Capacitor 1206 or 0805 SMD	pcpc	
20W PA	100nF	C13	1206-0805	Capacitor 1206 or 0805 SMD	pcpc	
20W PA	100nF	C14	1206-0805	Capacitor 1206 or 0805 SMD	pcpc	
20W PA	100nF	C15	1206-0805	Capacitor 1206 or 0805 SMD	pcpc	
20W PA	100nF	C16	1206-0805	Capacitor 1206 or 0805 SMD	pcpc	
20W PA	100nF	C17	1206-0805	Capacitor 1206 or 0805 SMD	pcpc	
20W PA	100nF	C18	1206-0805	Capacitor 1206 or 0805 SMD	pcpc	
20W PA	100nF	C2	1206-0805	Capacitor 1206 or 0805 SMD	pcpc	
20W PA	100nF	C20	1206-0805	Capacitor 1206 or 0805 SMD	pcpc	
20W PA	100nF	C21	1206-0805	Capacitor 1206 or 0805 SMD	pcpc	
20W PA	100nF	C22	1206-0805	Capacitor 1206 or 0805 SMD	pcpc	
20W PA	100nF	C23	1206-0805	Capacitor 1206 or 0805 SMD	pcpc	
20W PA	100nF	C24	1206-0805	Capacitor 1206 or 0805 SMD	pcpc	
20W PA	100nF	C26	1206-0805	Capacitor 1206 or 0805 SMD	pcpc	
20W PA	100nF	C27	1206-0805	Capacitor 1206 or 0805 SMD	pcpc	
20W PA	100nF	C4	1206-0805	Capacitor 1206 or 0805 SMD	pcpc	
20W PA	100nF	C5	1206-0805	Capacitor 1206 or 0805 SMD	pcpc	
20W PA	100nF	C6	1206-0805	Capacitor 1206 or 0805 SMD	pcpc	

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20W PA	100nF	C7	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
20W PA	100nF	C8	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
20W PA	100nF	C9	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
Codec board	100nF	C104	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
Codec board	100nF	C105	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
Codec board	100nF	C106	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
Codec board	100nF	C85	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
Codec board	100nF	C86	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
Codec board	100nF	C87	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
Codec board	100nF	C88	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
Codec board	100nF	C89	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DDS Assy	100nF	C10	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DDS Assy	100nF	C11	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DDS Assy	100nF	C12	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DDS Assy	100nF	C13	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DDS Assy	100nF	C14	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DDS Assy	100nF	C16	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DDS Assy	100nF	C18	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DDS Assy	100nF	C8	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DDS Assy	100nF	C9	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DSP board	100nF	C100	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DSP board	100nF	C101	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DSP board	100nF	C102	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DSP board	100nF	C103	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DSP board	100nF	C107	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DSP board	100nF	C2	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DSP board	100nF	C98	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DSP board	100nF	C99	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DSP M'board	100nF	C100	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DSP M'board	100nF	C108	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DSP M'board	100nF	C113	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DSP M'board	100nF	C114	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DSP M'board	100nF	C66	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	C10X	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	C16X	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	C1X	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	C2X	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	C46	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	C48	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	C49	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	C50	1206-0805	Capacitor 1206 or 0805 SMD	pcpc

PICaSTAR "A" Panel parts only

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IF board	100nF	C51	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	C52	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	C53	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	C54	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	C55	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	C56	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	C57	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	C58	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	C58A	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	C60	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	C62	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	C63	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	C63A	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	C64	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	C64A	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	C65	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	C6X	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	C74	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	C7X	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	C9X	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	CZ4	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	CZ5	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	CZ6	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	CZ7	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	CZ8	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100nF	C527	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
Matrix/Amp	100nF	C10	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	100nF	C11	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	100nF	C12	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	100nF	C12VIN	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	100nF	C13	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	100nF	C14	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	100nF	C15	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	100nF	C16	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	100nF	C17	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	100nF	C18	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	100nF	C19	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	100nF	C20	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	100nF	C21	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	100nF	C22	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	100nF	C23	1206-0805	Capacitor 1206 or 0805 SMD	pcpc

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MR pcb	100nF	C24	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	100nF	C25	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	100nF	C26	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	100nF	C27	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	100nF	C28	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	100nF	C29	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	100nF	C30	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	100nF	C31	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	100nF	C32	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	100nF	C33	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	100nF	C34	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	100nF	C35	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	100nF	C36	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	100nF	C8	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	100nF	C9	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Butler	100nF	C18	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Control	100nF	C2	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Control	100nF	C81	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Control	100nF	C82	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Control	100nF	C83	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
Timer	100nF	C77	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
Timer	100nF	C78	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
Timer	100nF	C79	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
Timer	100nF	C80	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DDS Assy	100pF	C17	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DDS Filter	100pF	C5	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	100pF	C15X	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DDS Assy	10nF	C15	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DDS Assy	10nF	C19	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	10nF	C12X	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	10nF	C37	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	10nF	C38	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	10nF	C39	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	10nF	C40	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	10nF	C41	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	10nF	C42	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	10nF	C43	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	10nF	C44	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	10nF	C61	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	10nF	C70	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	10nF	C71	1206-0805	Capacitor 1206 or 0805 SMD	pcpc

PICaSTAR "A" Panel parts only

IF board	10nF	CZ1	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Butler	10nF	C103	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Butler	10nF	C104	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Butler	10nF	C105	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Butler	10nF	C107	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Butler	10nF	C108	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Butler	10nF	C108A	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Butler	10nF	C20	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Butler	10nF	C22	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Butler	10nF	C23	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Butler	10nF	C6	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Control	10nF	C1	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Control	10nF	C10	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Control	10nF	C11	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Control	10nF	C16	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Control	10nF	C34	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Control	10nF	C35	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Control	10nF	C36	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Control	10nF	C37	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Control	10nF	C38	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Control	10nF	C39	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Control	10nF	C68	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM But/Opto	10nF	C67	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	10pF	C21	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Control	15pF	C29	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Control	15pF	C30	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
Matrix/Amp	180pF	C10	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
Matrix/Amp	180pF	C3	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DSP board	18pF	C120	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DSP board	18pF	C121	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
20W PA	1nF	C29	1206-0805	Capacitor 1206 preferred Fit only with C30 if C31 NOT fitted	pcpc
20W PA	1nF	C30	1206-0805	Capacitor 1206 preferred Fit only with C29 if C31 NOT fitted	pcpc
IF board	1nF	C35	1206-0805	capacitor 1206 or 0805 SMD	pcpc
IF board	1nF	C36	1206-0805	capacitor 1206 or 0805 SMD	pcpc
IF board	1nF	CZ10	MONO or ceramic	Capacitor	pcpc
IF board	1nF	CZ9	MONO or ceramic	Capacitor	pcpc
MR pcb	1nF	C7	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	1nF	CSQ1	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	1nF	CSQ2	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Butler	1nF	C12	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Butler	1nF	C13	1206-0805	Capacitor 1206 or 0805 SMD	pcpc

PnM Butler	1nF	C14	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Butler	1nF	C17	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Butler	1nF	C19	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Butler	1nF	CX	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
Codec board	220nF	C95	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
Codec board	220nF	C96	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	220nF	C31	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	220nF	C32	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	220nF	C33	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	220nF	C34	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
20W PA	220pF	C3	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	220pF	C13X	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	220pF	C14X	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	220pF	C59	1206-0805	Capacitor Not FITTED	pcpc
IF board	22nF	C45	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
Codec board	22pF	C90	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
Codec board	22pF	C91	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Butler	22pF	C102	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Butler	22pF	C24	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Butler	22pF	C26	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
Codec board	270pF	C92	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
Codec board	270pF	C93	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	330pF	C5A	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	330pF	C6B	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Butler	33pF	C25	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DDS Filter	3p3	C1B	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DDS Filter	3p3	C7B	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Butler	3p3	C5	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
Codec board	47nF	C94	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DDS Filter	47pF	C1	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DDS Filter	47pF	C7	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
IF board	47pF	C20X	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Butler	10nF	C15	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Butler	56pF	C101	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DDS Filter	82pF	C2	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DDS Filter	82pF	C3	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DDS Filter	82pF	C4	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
DDS Filter	82pF	C6	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Butler	8p2	C106	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
PnM Butler	8p2	C4	1206-0805	Capacitor 1206 or 0805 SMD	pcpc
MR pcb	NF	C5B	1206-0805	Capacitor Not fitted	pcpc

220pF (value:- see Steves notes)

Not Fitted
SOT with Electret Mic

(was 47pF in error)

Last updated on 9th Nov 2007

MR pcb	NF	C6A	1206-0805	Capacitor Not fitted	pcpc
IF board	SOT	CZ2	1206-0805	Capacitor NOT FITTED	pcpc
PnM Butler	1000uF > 16V	C502	RB.2/4	polarized cap	pcpe
PnM Control	100uF/16v min	C40	RB.1/2	polarized cap (vertical mounting)	pcpe
PnM Control	100uF/16v min	C41	RB.1/2	polarized cap (vertical mounting)	pcpe
PnM Control	100uF/16v min	C8	RB.2/4	polarized cap (vertical mounting)	pcpe
PnM Control	100uF/16v min	C9	RB.2/4	polarized cap (vertical mounting)	pcpe
PnM Butler	10uF	C504A	RB.1/2	Cap polarized vertical mtg	pcpe
PnM Butler	10uF /16v	C7	RB.1/2	Cap polarized vertical mtg	pcpe
IF board	10uF/16v	C24	RB.1/2	polarized cap	pcpe
IF board	10uF/16V	CZ11A	RB.1/2	alternate vertical through hole part for CZ11	pcpe
Matrix/Amp	10uF/16V	C7	RB.1/2	polarized cap vertical type	pcpe
IF board	10uF/16V (C-CASE)	CZ11	C CASE	alternate part for CZ11A	pcpe
Codec board	10uF/16v min	C123	RB.1/2	polarized cap Vertical type through hole	pcpe
Codec board	10uF/16v min	C124	RB.1/2	polarized cap Vertical type through hole	pcpe
Codec board	10uF/16v min	C125	RB.1/2	polarized cap Vertical type through hole	pcpe
Codec board	10uF/16v min	C128	RB.1/2	polarized cap Vertical type through hole	pcpe
PnM Control	10uF/16v min	C504	RB.1/2	polarized cap (vertical mounting)	pcpe
20W PA	10uF/25V	C11	RB.1/2	polarized cap (vertical mounting)	pcpe
20W PA	10uF/25V	C19	RB.1/2	polarized cap (vertical mounting)	pcpe
20W PA	10uF/25V	C28	RB.1/2	polarized cap (vertical mounting)	pcpe
Codec board	1uF	C126	ACASE	1uF/10v SMD	pcpe
Codec board	1uF	C127	ACASE	1uF/10v SMD	pcpe
Codec board	1uF	C129	ACASE	1uF/10v SMD	pcpe
Codec board	1uF	C130	ACASE	1uF/10v SMD	pcpe
DSP M'board	1uF	C115	ACASE	1uF/10v SMD	pcpe
DSP M'board	1uF	C116	ACASE	1uF/10v SMD	pcpe
DSP M'board	1uF	C117	ACASE	1uF/10v SMD	pcpe
DSP M'board	1uF	C118	ACASE	1uF/10v SMD	pcpe
DSP M'board	1uF	C119	ACASE	1uF/10v SMD	pcpe
DSP M'board	1uF	C133	ACASE	1uF/10v SMD	pcpe
IF board	1uF	CZ3	ACASE	1uF/10v SMD	pcpe
DSP M'board	220uF/16V	C69	RB.2/4	polarized cap vertical type	pcpe
IF board	220uF/16V	C22	RB.2/4	polarized cap thru hole vertical	pcpe
IF board	220uF/16V	C23	RB.2/4	polarized cap thru hole vertical	pcpe
IF board	220uF/16V	C26	RB.2/4	polarized cap thru hole vertical	pcpe
Matrix/Amp	220uF/16V	C5	RB.2/4	polarized cap vertical type	pcpe
Matrix/Amp	220uF/16V	C528	RB.2/4	polarized cap vertical type	pcpe
Matrix/Amp	220uF/16V	C9	RB.2/4	polarized cap vertical type	pcpe
Timer	220uF/16V	C20	RB.2/4	polarized cap, vertical type	pcpe
MR pcb	22uF	C2	RB.1/2	Electro cap through hole type (vertical)	pcpe

if required to pad trimmer

16V is ok or higher if they will fit

MR pcb	22uF	RB.1/2	Electro cap through hole type (vertical)	16V is ok or higher if they will fit	pcpe
MR pcb	22uF	RB.1/2	Electro cap through hole type (vertical)	16V is ok or higher if they will fit	pcpe
DSP M'board	33uF	CCASE	33uF/>6V SMD	CAN FIT THROUGH HOLE CAP AS HOLES	pcpe
Timer	33uF	RB.1/2	polarized cap, vertical type	16V is ok or higher if they will fit	pcpe
Timer	33uF	RB.1/2	polarized cap, vertical type	16V is ok or higher if they will fit	pcpe
IF board	33uF/16 or 25v	RB.1/2	Thru hole vertical type (could be 47uF!)		pcpe
PnM Control	33uF/16v	RB.1/2	polarized cap (vertical mounting)		pcpe
PnM Butler	470uF /16v	RB.2/4	polarized cap vertical type		pcpe
Matrix/Amp	470uF/16V	RB.2/4	polarized cap vertical type		pcpe
IF board	47uF/16v	RB.1/2	through hole vertical type		pcpe
PnM Butler	47uF/16v	RB.1/2	through hole vertical type		pcpe
DSP board	4u7	RB.1/2	4u7/16V OR 25V THRU HOLE CAPACITOR		pcpe
DSP M'board	4u7	RB.1/2	4u7/16V OR 25V THRU HOLE CAPACITOR		pcpe
DDS Assy	4u7/10V	ACASE	polarized cap		pcpe
DDS Assy	4u7/10V	ACASE	polarized cap		pcpe
DDS Assy	4u7/10V	ACASE	polarized cap		pcpe
DDS Assy	4u7/10V	ACASE	polarized cap		pcpe
DDS Assy	4u7/10V	ACASE	polarized cap		pcpe
DDS Assy	4u7/10V	ACASE	polarized cap		pcpe
DDS Assy	4u7/10V	ACASE	polarized cap		pcpe
IF board	4u7/16V	RB.1/2	alternate vertical through hole to CZ12A (fit one only)		pcpe
IF board	4u7/16V	ACASE	alternate to CZ12, fit one only		pcpe
PnM Control	4u7/16V	RB.1/2	polarized cap (vertical mounting)	SOT FOR EXTERNAL S	pcpe
IF board	1nF F/T Cap	1nF f/t Cap		suit 3mm hole in pcb	pcpf
IF board	1nF F/T Cap	1nF f/t Cap		suit 3mm hole in pcb	pcpf
IF board	1nF F/T Cap	1nF f/t Cap		suit 3mm hole in pcb	pcpf
IF board	1nF F/T Cap	1nF f/t Cap		suit 3mm hole in pcb	pcpf
IF board	1nF F/T Cap	1nF f/t Cap		suit 3mm hole in pcb	pcpf
IF board	1nF F/T Cap	1nF f/t Cap		suit 3mm hole in pcb	pcpf
IF/DSP	1nF F/T Cap	1nF f/t Cap	C19 10v feed into the 10.710MHz osc section		pcpf
IF/DSP	1nF F/T Cap	1nF f/t Cap	C1 12V RX		pcpf
IF/DSP	1nF F/T Cap	1nF f/t Cap	C10 MIC IN	f/t caps in wall of IF/DSP	pcpf
IF/DSP	1nF F/T Cap	1nF f/t Cap	C11 RIGHT AF OUT TO AF AMP	f/t caps in wall of IF/DSP	pcpf
IF/DSP	1nF F/T Cap	1nF f/t Cap	C12 LEFT	f/t caps in wall of IF/DSP	pcpf
IF/DSP	1nF F/T Cap	1nF f/t Cap	C2 12V TX	f/t caps in wall of IF/DSP	pcpf
IF/DSP	1nF F/T Cap	1nF f/t Cap	C3 +10V	f/t caps in wall of IF/DSP	pcpf
IF/DSP	1nF F/T Cap	1nF f/t Cap	C4 10V IN AFTER EXTERNAL DIODES IN SERIES	f/t caps in wall of IF/DSP	pcpf
IF/DSP	1nF F/T Cap	1nF f/t Cap	C5 PTT	f/t caps in wall of IF/DSP	pcpf
IF/DSP	1nF F/T Cap	1nF f/t Cap	C6 KEY	f/t caps in wall of IF/DSP	pcpf
IF/DSP	1nF F/T Cap	1nF f/t Cap	C7 DSP COMMANDS FROM PIC OR PC	f/t caps in wall of IF/DSP	pcpf
IF/DSP	1nF F/T Cap	1nF f/t Cap	C8 T/R STATUS TO PIC AND TIMER	f/t caps in wall of IF/DSP	pcpf
IF/DSP	1nF F/T Cap	1nF f/t Cap	C9 BUFFERED AGC (NO LONGER USED)	f/t caps in wall of IF/DSP	pcpf
IF/DSP	1nF F/T Cap	not used			pcpf

MR pcb	660nH 14T ON T25-2	L2	IND-250	Ref STAR for winding details and cores	plft
20W PA	6T:4T	T2	BN-1	Refer to Steve's web pages for core and winding information	plft
DDS Assy	BALUN CORE	T1	COIL6X6-2	see STAR for material used	plft
Codec board	ferrite bead 43 mix	FB1	AXIAL0.4	1 TURN WIRE THRU BEAD	plft
Codec board	ferrite bead 43 mix	FB2	AXIAL0.4	1 TURN WIRE THRU BEAD	plft
IF board	FT37-43 10T:3T	T2	IND-FT37	Refer to STAR for winding and core details	plft
PnM Butler	IND-TOROID	L100	IND-TOROID-V	see STAR for winding details	plft
MR pcb	MCL 4:1	T3	DIP-6	Transformer Ref STAR for core and winding details	plft
MR pcb	MCL 4:1	T4	DIP-6	Transformer Ref STAR for core and winding details	plft
MR pcb	MCL 4:1	T5	DIP-6	Transformer Ref STAR for core and winding details	plft
MR pcb	See Part 18	T1	IND-T1	Transformer Ref STAR for core and winding details	plft
MR pcb	See Part 18	T2	IND-T2	Transformer Ref STAR for core and winding details	plft
IF board	T37-2 (29+7T)	L2	IND-FT37	Refer to STAR for winding and core details	plft
DDS Filter	RELAY OMRON G5V-1	RELAY1	RELAY-OMRON-C-RELAY 12v SPDT OMRON G5V-1	Note 1	plre
DDS Filter	RELAY OMRON G5V-1	RELAY2	RELAY-OMRON-C-RELAY 12v SPDT OMRON G5V-1	Note 1	plre
IF board	100uH	RFC10	Inductor		plrf
IF board	100uH	RFC4	Inductor		plrf
IF board	100uH	RFC5	Inductor		plrf
IF board	100uH	RFC9	Inductor		plrf
PnM Butler	1uH	L2	axial 0.4		plrf
PnM Butler	680nH	L1	axial 0.4	Farnell 512-450 ?	plrf
20W PA	100R	R10	AXIAL0.4	Resistor through hole axial type	prax
20W PA	100R	R11	AXIAL0.4	Resistor through hole axial type	prax
20W PA	100R	R2	AXIAL0.4	Resistor through hole axial type	prax
20W PA	100R	R3	AXIAL0.4	Resistor through hole axial type	prax
20W PA	100R	R5	AXIAL0.4	Resistor through hole axial type	prax
20W PA	10K	R4	AXIAL0.4	Resistor through hole axial type	prax
PnM Butler	10K NTC	TH101	through hole	STAR Group has a recommended Farnell part #	prax
PnM Butler	18R 0.5W AXIAL	R101	AXIAL0.4	see wiring detail one only fitted (R101 or R101A)	prax
PnM Butler	18R 0.5w axial	R101A	axial0.4	see wiring detail one only fitted (R101 or R101A)	prax
20W PA	1K5	R6	AXIAL0.4	Resistor through hole axial type	prax
20W PA	270R 1W	R7	AXIAL0.4	Resistor through hole axial type	prax
20W PA	27R	R1	AXIAL0.4	Resistor through hole axial type	prax
20W PA	27R	R12	AXIAL0.4	Resistor through hole axial type	prax
20W PA	27R	R13	AXIAL0.4	Resistor through hole axial type	prax
20W PA	33R	R8	AXIAL0.4	Resistor through hole axial type	prax
20W PA	82R	R9	AXIAL0.4	Resistor through hole axial type	prax
IF board	0R	R37	1206-0805	Resistor 1206 or 0805 SMD	prsm
DSP M'board	100K	R98	1206-0805	Resistor 1206 or 0805 SMD	prsm
DSP M'board	100K	R99	1206-0805	Resistor 1206 or 0805 SMD	prsm
IF board	100K	R3X	1206-0805	Resistor 1206 or 0805 SMD	prsm

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IF board	100K	R62	1206-0805	Resistor 1206 or 0805 SMD	prism
DDS Assy	100R	R1	1206-0805	resistor 1206 or 0805 SMD	prism
DDS Assy	100R	R2	1206-0805	resistor 1206 or 0805 SMD	prism
IF board	100R	R1X	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	100R	R2	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	100R	R2Z	1206-0805	Resistor 1206 or 0805 SMD	prism
MR pcb	100R	R33A	1206-0805	Resistor 1206 or 0805 SMD	prism
MR pcb	100R	R33B	1206-0805	Resistor 1206 or 0805 SMD	prism
MR pcb	100R	R34A	1206-0805	Resistor 1206 or 0805 SMD	prism
MR pcb	100R	R34B	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Butler	100R	R111	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Butler	100R	R17	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	100R	R27	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	100R	R28	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	100R	R29	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	100R	R2X	axial	Axial resistor. Please check glennpcb's web page for fitting details	prism
PnM Control	100R	R30	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	100R	R31	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	100R	R76	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	100R	R77	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	100R	R48	1206-0805	Resistor 1206 or 0805 SMD	prism
Timer	100R	R49	1206-0805	Resistor 1206 or 0805 SMD	prism
Timer	100R	R2	1206-0805	resistor 1206 or 0805 SMD	prism
Beeper board	10K	R85	1206-0805	Resistor 1206 or 0805 SMD	prism
Codec board	10K	R86	1206-0805	Resistor 1206 or 0805 SMD	prism
Codec board	10K	R87	1206-0805	Resistor 1206 or 0805 SMD	prism
Codec board	10K	R88	1206-0805	Resistor 1206 or 0805 SMD	prism
DDS Filter	10K	R1	1206-0805	Resistor 1206 OR 0805 SMD	prism
DDS Filter	10K	R2	1206-0805	Resistor 1206 OR 0805 SMD	prism
DSP board	10K	R78	1206-0805	Resistor 1206 or 0805 SMD	prism
DSP board	10K	R79	1206-0805	Resistor 1206 or 0805 SMD	prism
DSP board	10K	R80	1206-0805	Resistor 1206 or 0805 SMD	prism
DSP board	10K	R81	1206-0805	Resistor 1206 or 0805 SMD	prism
DSP board	10K	R82	1206-0805	Resistor 1206 or 0805 SMD	prism
DSP board	10K	R83	1206-0805	Resistor 1206 or 0805 SMD	prism
DSP board	10K	R84	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	10K	R21	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	10K	R22	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	10K	R23	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	10K	R24	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	10K	R25	1206-0805	Resistor 1206 or 0805 SMD	prism

PICaSTAR "A" Panel parts only

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IF board	10K	R26	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	10k	R27	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	10K	R28	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	10K	R29	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	10K	R30	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	10K	R31	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	10K	R63	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	10K	RZ6	1206-0805	Resistor 1206 or 0805 SMD	prism
Matrix/Amp	10K	R501	1206-0805	Resistor 1206 or 0805 SMD	prism
Matrix/Amp	10K	R503	1206-0805	Resistor 1206 or 0805 SMD	prism
Matrix/Amp	10K	R505	1206-0805	Resistor 1206 or 0805 SMD	prism
Matrix/Amp	10K	R506	1206-0805	Resistor 1206 or 0805 SMD	prism
Matrix/Amp	10K	R9	1206-0805	Resistor 1206 or 0805 SMD	prism
Matrix/Amp	10K	Rdds	1206-0805	Resistor 1206 or 0805 SMD	prism
MR pcb	10K	R24	1206-0805	Resistor 1206 or 0805 SMD	prism
MR pcb	10K	R25	1206-0805	Resistor 1206 or 0805 SMD	prism
MR pcb	10K	R26	1206-0805	Resistor 1206 or 0805 SMD	prism
MR pcb	10K	R27	1206-0805	Resistor 1206 or 0805 SMD	prism
MR pcb	10K	R28	1206-0805	Resistor 1206 or 0805 SMD	prism
MR pcb	10K	R33	1206-0805	Resistor 1206 or 0805 SMD	prism
MR pcb	10k	RX1	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Butler	10K	R7	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Butler	10K	R8	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	10K	R545	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	10K	R546	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	10K	R547	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	10K	R73	1206-0805	Resistor 1206 or 0805 SMD	prism
Timer	10K	R53	1206-0805	Resistor 1206 or 0805 SMD	prism
Timer	10K	R54	1206-0805	Resistor 1206 or 0805 SMD	prism
Timer	10K	R55	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Butler	10R	R19A	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	10R	R19	1206-0805	Resistor 1206 or 0805 SMD	prism
Timer	10R	R56	1206-0805	Resistor 1206 or 0805 SMD	prism
Timer	10R	R57	1206-0805	Resistor 1206 or 0805 SMD	prism
Timer	10R	R58	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	120K	R38	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Butler	15K	R105	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Butler	15R	R103	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Butler	180R	R11	1206-0805	Resistor 1206 or 0805 SMD	prism
Beeper board	1K	R1	1206-0805	Resistor 1206 or 0805 SMD	prism
DDS Assy	1K	R5	1206-0805	Resistor 1206 or 0805 SMD	prism

PICaSTAR "A" Panel parts only

Last updated on 9th Nov 2007

DSP M'board	1K	R9	Resistor 1206 or 0805 SMD	prsm
IF board	1K	R4X	Resistor 1206 or 0805 SMD	prsm
MR pcb	1K	R9	Resistor 1206 or 0805 SMD	prsm
PnM Butler	1K	R106	Resistor 1206 or 0805 SMD	prsm
PnM Butler	1K	R108	Resistor 1206 or 0805 SMD	prsm
PnM Butler	1K	R110	Resistor 1206 or 0805 SMD	prsm
PnM Butler	1K	R14	Resistor 1206 or 0805 SMD	prsm
PnM Control	1K	R20	Resistor 1206 or 0805 SMD	prsm
PnM Control	1K	R21	Resistor 1206 or 0805 SMD	prsm
PnM Control	1K	R23	Resistor 1206 or 0805 SMD	prsm
PnM Control	1K	R64	Resistor 1206 or 0805 SMD	prsm
PnM Control	1K	R65	Resistor 1206 or 0805 SMD	prsm
PnM Control	1K	R66	Resistor 1206 or 0805 SMD	prsm
PnM Control	1K	R67	Resistor 1206 or 0805 SMD	prsm
PnM Control	1K	R68	Resistor 1206 or 0805 SMD	prsm
PnM Control	1K	R69	Resistor 1206 or 0805 SMD	prsm
PnM Control	1K	R70	Resistor 1206 or 0805 SMD	prsm
PnM Control	1K	R71	Resistor 1206 or 0805 SMD	prsm
PnM Control	1K	R74A	Resistor 1206 or 0805 SMD	prsm
PnM Control	1K	R74B	Resistor 1206 or 0805 SMD	prsm
PnM Control	1K	R74C	Resistor 1206 or 0805 SMD	prsm
PnM Control	1K	R74D	Resistor 1206 or 0805 SMD	prsm
PnM Control	1K	R75A	Resistor 1206 or 0805 SMD	prsm
PnM Control	1K	R75b	Resistor 1206 or 0805 SMD	prsm
PnM Control	1K	R75C	Resistor 1206 or 0805 SMD	prsm
PnM Control	1K	R75D	Resistor 1206 or 0805 SMD	prsm
PnM Control	1K	R75E	Resistor 1206 or 0805 SMD	prsm
PnM Control	1K	R75F	Resistor 1206 or 0805 SMD	prsm
PnM Control	1K	R75G	Resistor 1206 or 0805 SMD	prsm
PnM Control	1K	R75H	Resistor 1206 or 0805 SMD	prsm
Timer	1K	R50	Resistor 1206 or 0805 SMD	prsm
MR pcb	1K5	R34	Resistor 1206 or 0805 SMD	prsm
PnM Butler	1K5	R104	Resistor 1206 or 0805 SMD	prsm
Codec board	220R	R101X	Resistor 1206 or 0805 SMD	prsm
IF board	220R	R3	Resistor 1206 or 0805 SMD	prsm
Beeper board	22K	R3	resistor 1206 or 0805 SMD	prsm
DDS Assy	22K	R4	Resistor 1206 or 0805 SMD	prsm
DSP M'board	22K	R39	Resistor 1206 or 0805 SMD	prsm
DSP M'board	22K	R40	Resistor 1206 or 0805 SMD	prsm
IF board	22K	R12	Resistor 1206 or 0805 SMD	prsm
IF board	22K	R34	Resistor 1206 or 0805 SMD	prsm

refer STAR Msg#21604
USE WITH ALTERNATE IC24

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IF board	22K	R7	1206-0805	Resistor 1206 or 0805 SMD		prsm
Matrix/Amp	22K	R11	1206-0805	Resistor 1206 or 0805 SMD	value corrected 01-10-07	prsm
Matrix/Amp	22K	R7	1206-0805	Resistor 1206 or 0805 SMD	value corrected 01-10-07	prsm
MR pcb	22K	R29	1206-0805	Resistor 1206 or 0805 SMD		prsm
MR pcb	22R	R36	1206-0805	Resistor 1206 or 0805 SMD		prsm
MR pcb	22R	R37	1206-0805	Resistor 1206 or 0805 SMD		prsm
MR pcb	22R	R4	1206-0805	Resistor 1206 or 0805 SMD		prsm
MR pcb	22R	R5	1206-0805	Resistor 1206 or 0805 SMD		prsm
MR pcb	22R	R6	1206-0805	Resistor 1206 or 0805 SMD		prsm
MR pcb	22R	R7	1206-0805	Resistor 1206 or 0805 SMD		prsm
Matrix/Amp	270K	R10	1206-0805	Resistor 1206 or 0805 SMD	value corrected 01-10-07	prsm
Matrix/Amp	270K	R8	1206-0805	Resistor 1206 or 0805 SMD	value corrected 01-10-07	prsm
PnM Control	270K	R24	1206-0805	Resistor 1206 or 0805 SMD		prsm
PnM Control	270K	R25	1206-0805	Resistor 1206 or 0805 SMD		prsm
PnM Control	270K	R26	1206-0805	Resistor 1206 or 0805 SMD		prsm
Codec board	27R	R103X	1206-0805	Resistor 1206 or 0805 SMD		prsm
DSP M'board	2K2	R91	1206-0805	Resistor 1206 or 0805 SMD		prsm
DSP M'board	2K2	R92	1206-0805	Resistor 1206 or 0805 SMD		prsm
IF board	2K2	R10	1206-0805	Resistor 1206 or 0805 SMD		prsm
IF board	2K2	RZ10	1206-0805	Resistor 1206 or 0805 SMD		prsm
IF board	2K2	RZ11	1206-0805	Resistor 1206 or 0805 SMD		prsm
IF board	2K2	RZ7	1206-0805	Resistor 1206 or 0805 SMD		prsm
IF board	2K2	RZ8	1206-0805	Resistor 1206 or 0805 SMD		prsm
IF board	2K2	RZ9	1206-0805	Resistor 1206 or 0805 SMD		prsm
MR pcb	2K2	R10	1206-0805	Resistor 1206 or 0805 SMD		prsm
MR pcb	2K2	R11	1206-0805	Resistor 1206 or 0805 SMD		prsm
MR pcb	2K2	R12	1206-0805	Resistor 1206 or 0805 SMD		prsm
MR pcb	2K2	R13	1206-0805	Resistor 1206 or 0805 SMD		prsm
MR pcb	2K2	R14	1206-0805	Resistor 1206 or 0805 SMD		prsm
MR pcb	2K2	R15	1206-0805	Resistor 1206 or 0805 SMD		prsm
MR pcb	2K2	R16	1206-0805	Resistor 1206 or 0805 SMD		prsm
MR pcb	2K2	R17	1206-0805	Resistor 1206 or 0805 SMD		prsm
MR pcb	2K2	R18	1206-0805	Resistor 1206 or 0805 SMD		prsm
MR pcb	2K2	R19	1206-0805	Resistor 1206 or 0805 SMD		prsm
MR pcb	2K2	R20	1206-0805	Resistor 1206 or 0805 SMD		prsm
MR pcb	2K2	R21	1206-0805	Resistor 1206 or 0805 SMD		prsm
MR pcb	2K2	R22	1206-0805	Resistor 1206 or 0805 SMD		prsm
MR pcb	2K2	R23	1206-0805	Resistor 1206 or 0805 SMD		prsm
MR pcb	2K2	RSQ2	1206-0805	Resistor 1206 or 0805 SMD		prsm
MR pcb	2K2	RSQ3	1206-0805	Resistor 1206 or 0805 SMD		prsm
PnM Control	2k2	R35	1206-0805	Resistor 1206 or 0805 SMD		prsm

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PnM Control	2K2	R36	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	2K2	R37	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	2K2	R38	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	2K2	R39	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	2K2	R40	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	2K2	R543	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	2K2	R72	1206-0805	Resistor 1206 or 0805 SMD	prism
Timer	2K2	R52	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	2K7	R11	1206-0805	Resistor 1206 or 0805 SMD	prism
Codec board	330R	R102X	1206-0805	Resistor 1206 or 0805 SMD	prism
DSP M'board	330R	R89A	1206-0805	Resistor 1206 or 0805 SMD	prism
DSP M'board	330R	R90	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	33K	R2X	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Butler	390R	R109	1206-0805	Resistor 1206 or 0805 SMD	prism
DSP M'board	3K3	R44	1206-0805	Resistor 1206 or 0805 SMD	prism
DSP M'board	3k3	R89	1206-0805	NOT USED	prism
IF board	3k3	R13	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	3K3	R14	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	3K3	R15	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	3k3	R1 OPTN	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	3K3	R41	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	3K3	R42	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	3K3	R43	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	3K3	R44	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	3K3	R45	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	3K3	R46	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	3K3	R47	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	3K3	R48	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	3K3	R502	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	3K3	R504	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	3k3	R507	1206-0805	Resistor 1206 or 0805 SMD	prism
DDS Assy	3K9	R6	1206-0805	Resistor 1206 or 0805 SMD	prism
Beeper board	470R	R4	1206-0805	Resistor 1206 or 0805 SMD	prism
Beeper board	470R	R5	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	470R	R4	1206-0805	Resistor 1206 or 0805 SMD	prism
MR pcb	470R	R8	1206-0805	Resistor 1206 or 0805 SMD	prism
MR pcb	470R	RSQ1	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Butler	470R	R13	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	470R	R49	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	470R	R50	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	470R	R51	1206-0805	Resistor 1206 or 0805 SMD	prism

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PnM Control	470R	R52	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	470R	R53	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	470R	R54	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	470R	R55	1206-0805	Resistor 1206 or 0805 SMD	prism
Codec board	47K	R104	1206-0805	Resistor 1206 or 0805 SMD	prism
Codec board	47K	R105	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	47K	R33	1206-0805	Resistor 1206 or 0805 SMD	prism
MR pcb	47K	R30	1206-0805	Resistor 1206 or 0805 SMD	prism
MR pcb	47K	R31	1206-0805	Resistor 1206 or 0805 SMD	prism
MR pcb	47K	R32	1206-0805	Resistor 1206 or 0805 SMD	prism
Timer	47K	R51	1206-0805	Resistor 1206 or 0805 SMD	prism
Timer	47K	R59	1206-0805	Resistor 1206 or 0805 SMD	prism
Timer	47K	R60	1206-0805	Resistor 1206 or 0805 SMD	prism
Timer	47K	R61	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	47R	R1	1206-0805	Resistor 1206 or 0805 SMD	prism
MR pcb	47R	R35	1206-0805	Resistor 1206 or 0805 SMD	prism
Beeper board	4K7	R6	1206-0805	Resistor 1206 or 0805 SMD	prism
Codec board	4K7	R100	1206-0805	Resistor 1206 or 0805 SMD	prism
Codec board	4K7	R101	1206-0805	Resistor 1206 or 0805 SMD	prism
Codec board	4K7	R102	1206-0805	Resistor 1206 or 0805 SMD	prism
Codec board	4K7	R103	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	4K7	R16	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	4K7	R17	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	4K7	R18	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	4K7	R19	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	4K7	Rx58A	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	4K7	R544	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Control	4K7	R73A	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	510R	RZ12	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	510R	RZ13	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	560R	R5	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	560R	R6	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Butler	560R	R102	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Butler	560R	R5	1206-0805	Resistor 1206 or 0805 SMD	prism
MR pcb	56R	R1	1206-0805	Resistor 1206 or 0805 SMD	prism
MR pcb	56R	R2	1206-0805	Resistor 1206 or 0805 SMD	prism
MR pcb	56R	R3	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Butler	56R	R108A	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Butler	56R	R12	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Butler	56R	R15	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	5K6	R20	1206-0805	Resistor 1206 or 0805 SMD	prism

Not fitted

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PnM Butler	5R6	R16	1206-0805	Resistor 1206 or 0805 SMD	prism
PnM Butler	680R	R107	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	68R	RZ1	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	6K8	R16X	1206-0805	value to suit Eletret Microhone if used !	prism
IF board	82R	RZ3	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	82R	RZ4	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	8K2	R32	1206-0805	Resistor 1206 or 0805 SMD	prism
IF board	SET ON TEST IN Tx SETU RX		1206-0805	value selected during set-up procedure	prism
IF board	100K trim pot	RV1	3306P-F	TRIM POT BOURNS 3306P or 3306F STYLE	ptrr
IF board	100K trim pot	RV2	3306P-F	TRIM POT BOURNS 3306P or 3306F STYLE	ptrr
PnM Control	100K trim pot	RV1 OPT	3306P-F	TRIM POT BOURNS 3306P or 3306F STYLE	ptrr
PnM Butler	10K trim pot	RV101	3306P-F	TRIM POT BOURNS 3306P or 3306F STYLE	ptrr
IF board	22k trim pot	RV4	3306P-F	TRIM POT BOURNS 3306P or 3306F STYLE	ptrr
20W PA	2K2 trim pot	VR1	RES-TRIM	TRIM POT (ALTERNATE FOOTPRINTS ARE PROVIDED FOR	ptrr
20W PA	2K2 trim pot	VR2	RES-TRIM	TRIM POT (ALTERNATE FOOTPRINTS ARE PROVIDED FOR	ptrr
20W PA	2K2 trim pot	VR3	RES-TRIM	TRIM POT (ALTERNATE FOOTPRINTS ARE PROVIDED FOR	ptrr
20W PA	2K2 trim pot	VR4	RES-TRIM	TRIM POT (ALTERNATE FOOTPRINTS ARE PROVIDED FOR	ptrr
MIR pcb	500K MULTI TURN	RV1	VR5	POTENTIOMETER 10 turn, pins in line 0.1" pitch	ptrr
IF board	50k trim pot Bourns 3306P/ RV5		3306P-F	TRIM POT BOURNS 3306P or 3306F STYLE	ptrr
IF board	"ITT" (10.7MHz)	FILTER1A	FILTER-ITT	Filter ITT 10.7MHz	pxtl
IF board	10M4D 8 POLE FILTER (1(FILTER1	10M4D		Sunny Corp.	pxtl
DSP board	16.67MHz	X3	XTAL1	(16.384MHz SEEMS TO WORK OK AND EASIER TO FIND)	pxtl
PnM Control	20MHz	XTAL	XTAL1	20MHz crystal for Star 2	pxtl
Codec board	24.576MHz	X4	XTAL1	(CAN BE FOUND ON SOME OLD COMPUTER BOARD Farnell etc.	pxtl
PnM Butler	eg~123.2MHz	XTAL101	HC44-2	Crystal freq is free. Refer to STAR information	pxtl
IF board	F_IF +15KHZ	XTAL	XTAL1	Crystal to be 15KHz above selected IF frequency	pxtl
IF board	4V7 Zener diode	ZD1	AXIAL0.4	Zener diode 400mW through hole type	sdiz
20W PA	5V6 Zener diode	ZD1	AXIAL0.4	Zener diode 400mW through hole type	sdiz
Beeper board	LED	LED1	led	LED 3mm colour of choice	sdlid
DSP M'board	LED	D35	LED 3mm	COLOUR AS YOU LIKE	sdlid
PnM Control	LED	D16	LED-3	LED 3mm colour as selected, refer to STAR	sdlid
PnM Control	LED	D17	LED-3	LED 3mm colour as selected, refer to STAR	sdlid
PnM Control	LED	D18	LED-3	LED 3mm colour as selected, refer to STAR	sdlid
PnM Control	LED	D19	LED-3	LED 3mm colour as selected, refer to STAR	sdlid
PnM Control	LED	D20	LED-3	LED 3mm colour as selected, refer to STAR	sdlid
PnM Control	LED	D22	LED-3	LED 3mm colour as selected, refer to STAR	sdlid
PnM Control	LED	D23	LED-3	LED 3mm colour as selected, refer to STAR	sdlid
PnM Control	LED	D24	LED-3	LED 3mm colour as selected, refer to STAR	sdlid
PnM Control	LED	D25	LED-3	LED 3mm colour as selected, refer to STAR	sdlid
PnM Control	LED	D26	LED-3	LED 3mm colour as selected, refer to STAR	sdlid
PnM Control	LED	D27	LED-3	LED 3mm colour as selected, refer to STAR	sdlid

Refer to Mods

Farnell etc.

Alternative to FILTER1
some Hy-Q types are compatible

Farnell etc.

PnM Control	LED	D28	LED-3	LED 3mm	colour as selected, refer to STAR	sdld
PnM Control	LED	D29	LED-3	LED 3mm	colour as selected, refer to STAR	sdld
PnM Control	LED	D30	LED-3	LED 3mm	colour as selected, refer to STAR	sdld
PnM Control	LED	D31	LED-3	LED 3mm	colour as selected, refer to STAR	sdld
PnM Control	LED	D32	LED-3	LED 3mm	colour as selected, refer to STAR	sdld
PnM Control	LED	D33	LED-3	LED 3mm	colour as selected, refer to STAR	sdld
PnM Control	LED	LED10	LED-12	LED 3mm	colour as selected, refer to STAR	sdld
PnM Control	LED	LED11	LED-12	LED 3mm	colour as selected, refer to STAR	sdld
PnM Control	LED	LED4	LED-12	LED 3mm	colour as selected, refer to STAR	sdld
PnM Control	LED	LED5	LED-12	LED 3mm	colour as selected, refer to STAR	sdld
PnM Control	LED	LED501	LED-3	LED 3mm	colour as selected, refer to STAR	sdld
PnM Control	LED	LED502	LED-3	LED 3mm	colour as selected, refer to STAR	sdld
PnM Control	LED	LED503	LED-3	LED 3mm	colour as selected, refer to STAR	sdld
PnM Control	LED	LED6	LED-12	LED 3mm	colour as selected, refer to STAR	sdld
PnM Control	LED	LED7	LED-12	LED 3mm	colour as selected, refer to STAR	sdld
PnM Control	LED	LED8	LED-12	LED 3mm	colour as selected, refer to STAR	sdld
PnM Control	LED	LED9	LED-12	LED 3mm	colour as selected, refer to STAR	sdld
PnM Control	LED, DUAL	D21	DUAL-LED	dual colour 3mm LED (has 3 leads)		sdld
PnM But/Opto	LD271	D1	LED	LED for opto coupler		sdli
DSP M'board	1N4007	D34	AXIAL0.4	Diode		sdls
DSP M'board	1N4007	D34A	AXIAL0.4	Diode		sdls
PnM Control	1N4007	D3	AXIAL0.4	Diode 1 amp type (reverse polarity protection)		sdls
IF board	BA224	D10	AXIAL0.3	Diode axial leads		sdrr
IF board	BA224	D7	AXIAL0.3	Diode axial leads		sdrr
IF board	BA224	D8	AXIAL0.3	Diode axial leads		sdrr
IF board	BA224	D9	AXIAL0.3	Diode axial leads		sdrr
20W PA	1N4148	D1	AXIAL0.4	Diode axial leads		sdss
DDS Filter	1N4148	D1	AXIAL0.3	Diode axial leads		sdss
DDS Filter	1N4148	D2	AXIAL0.3	Diode axial leads		sdss
DDS Filter	1N4148	D3	AXIAL0.3	Diode axial leads		sdss
DSP M'board	1N4148	D1	AXIAL0.4	Diode axial leads		sdss
DSP M'board	1N4148	D2	AXIAL0.4	Diode axial leads		sdss
IF board	1N4148	D5	AXIAL0.3	Diode axial leads		sdss
IF board	1N4148	D6	AXIAL0.3	Diode axial leads		sdss
Matrix/Amp	1N4148	D501	AXIAL0.3	Diode axial leads		sdss
Matrix/Amp	1N4148	D502	AXIAL0.3	Diode axial leads		sdss
Matrix/Amp	1N4148	D503	AXIAL0.3	Diode axial leads		sdss
Matrix/Amp	1N4148	D504	AXIAL0.3	Diode axial leads		sdss
Matrix/Amp	1N4148	D505	AXIAL0.3	Diode axial leads		sdss
Matrix/Amp	1N4148	D506	AXIAL0.3	Diode axial leads		sdss
Matrix/Amp	1N4148	D507	AXIAL0.3	Diode axial leads		sdss

RS Components ?

Matrix/Amp	1N4148	D508	AXIAL0.3	Diode axial leads	sdss
Matrix/Amp	1N4148	D509	AXIAL0.3	Diode axial leads	sdss
Matrix/Amp	1N4148	D510	AXIAL0.3	Diode axial leads	sdss
Matrix/Amp	1N4148	D511	AXIAL0.3	Diode axial leads	sdss
Matrix/Amp	1N4148	D512	AXIAL0.3	Diode axial leads	sdss
Matrix/Amp	1N4148	D513	AXIAL0.3	Diode axial leads	sdss
Matrix/Amp	1N4148	D514	AXIAL0.3	Diode axial leads	sdss
Matrix/Amp	1N4148	D515	AXIAL0.3	Diode axial leads	sdss
MR pcb	1N4148	D1	AXIAL0.4	Diode axial leads	sdss
MR pcb	1N4148	D2	AXIAL0.4	Diode axial leads	sdss
MR pcb	1N4148	D3	AXIAL0.4	Diode axial leads	sdss
MR pcb	1N4148	D4	AXIAL0.4	Diode axial leads	sdss
PnM Control	1N4148	D11	AXIAL0.4	Diode axial leads	sdss
PnM Control	1N4148	D2	AXIAL0.3	Diode axial leads	sdss
PnM Control	1N4148	D4	AXIAL0.4	Diode axial leads	sdss
PnM Control	1N4148	D73A	axial	Diode axial leads	sdss
Timer	1N4148	D11	AXIAL0.4	Diode axial leads	sdss
IF board	AD603	IC2	SO-8	AD603 note DIP or SMD package can be fitted (one only) check correct suffix on part number for footp sica	sica
IF board	AD603	IC2A	DIP8	AD603 note DIP or SMD package can be fitted (one only) check correct suffix on part number for footp sica	sica
PnM But/Opto	HL22705 (RS 196-993)	IC5	HLC2705	Opto receiver	RS Components
Matrix/Amp	LM4940TS	IC2	LM4940TS	LM4940TS (Farnell 818-1209)	Farnell also have LM4950TS alternate
DSP M'board	MAX232CWE / ST232CW	IC21	SOL-16	DUAL EIA-232 DRIVER/RECEIVER	use /CWE or EWE NOT ESE or CSE
IF board	74AC86	IC5	SO-14	SOIC package SMD IC	sicc
MR pcb	74AC86	IC3	SO-14	SOIC package SMD IC	sicc
PnM Control	74HC138D SMD	IC12	SO-16	SOIC package SMD IC	sicc
DSP M'board	74HC14	IC23	SO-14	SURFACE MOUNT (SOIC) IC	sicc
PnM Control	74LS47 (DIP)	IC11	DIP-16		sicc
Codec board	74LVX125	IC20	so-14	SOIC package SMD IC	sicc
DDS Assy	AD9951	IC1	GP-LCC48-WIDE	AD9951	sicc
IF board	FST3125	IC3	SO-14	FST3125 see also STAR for equivalent parts	SOIC package SMD IC
IF board	FST3125	IC4	SO-14	FST3125 see also STAR for equivalent parts	SOIC package SMD IC
IF board	FST3125	IC3	SO-14	FST3125 see also STAR for equivalent parts	SOIC package SMD IC
MR pcb	FST3126	IC4	SO-14	FST3126 see also STAR for equivalent parts	SOIC package SMD IC
MR pcb	FST3126	IC5	SO-14	FST3126 see also STAR for equivalent parts	SOIC package SMD IC
MR pcb	FST3126	IC6	SO-14	FST3126 see also STAR for equivalent parts	SOIC package SMD IC
PnM Control	HEF4094BT	IC13	SO-16	SOIC package SMD IC	sicc
PnM Control	HEF4094BT	IC16	SO-16	SOIC package SMD IC	sicc
PnM Control	HEF4094BT	IC6	SO-16	SOIC package SMD IC	sicc
PnM Control	HEF4094BT	IC7	SO-16	SOIC package SMD IC	sicc
Beeper board	LM339	U1	SO-14	SOIC package SMD IC	sicc
IF board	TL072	IC6	SOP8	SOIC package SMD IC	sicc

IF board	TL072	IC7	SOP8	SOIC package SMD IC	sicd
DSP M/board	TL7524CD	IC8	SO-16	SOIC package SMD IC (CHECK BRAND IS Texas)	sicd
Matrix/Amp	ULN2803	IC512	DIP-18	Eight Darlington Arrays DIP package	sicd
Timer	ULN2803	IC12	DIP-18	Eight Darlington Arrays DIP package	sicd
PnM Control	Maplin BY66W	DISP1	DIP18-DISPLAY	Refer also to original STAR documents for type used:	sico
PnM Control	Maplin BY66W	DISP1	DIP18-DISPLAY	Refer also to original STAR documents for type used:	sico
PnM Control	Maplin BY66W	DISP1	DIP18-DISPLAY	Refer also to original STAR documents for type used:	sico
Codec board	3V3 Reg LE33CZ	IC24	TO-92	SEE ALTERNATE PART (IC24a)	sicr
Codec board	78L05	IC18	to-92a	78L05 150mA THRU HOLE REGULATOR	sicr
DSP board	78L05	U1	TO-92A	78L05 150mA THRU HOLE REGULATOR	sicr
DSP M/board	78L05	IC19	TO-92A	78L05 150mA THRU HOLE REGULATOR	sicr
IF board	78L05	IC1	TO-92	78L05 150mA THRU HOLE REGULATOR	sicr
IF board	78L05	UJ2	TO-92	78L05 150mA THRU HOLE REGULATOR	sicr
MR pcb	78L05	IC1	TO-92A	78L05 150mA THRU HOLE REGULATOR	sicr
PnM Control	78L05	IC113	TO-92	78L05 150mA THRU HOLE REGULATOR	sicr
Timer	78L05	IC13	TO-92A	78L05 150mA THRU HOLE REGULATOR	sicr
PnM Butler	78L08	IC1	TO-92A	8v regulator, for Butler Osc.	sicr
PnM Butler	78L08	IC1X	TO-92A	8v regulator optional for separate heater supply	sicr
Codec board	AD1885	IC26	LQFP48	AD1885JST	sicr
Codec board	LM317LZ	IC24A	TO-92	1.2V To 37V alternate Regulator to IC24	sicr
PnM Butler	LM7805	IC2X	TO-220	for DDS carrier (78L05 to-92 OK also)	sicr
PnM Control	LM7805	IC2	TO-220	1 amp regulator, 5volts	sicr
Timer	LM7810T or equivalent	IC14	TO-220	10V 1A regulator TO-220	sicr
MR pcb	LM78L62ACZ	IC2	TO-92A	6.2V regulator	sicr
DDS Assy	XC6201P182PRN	IC3	SOT-89	XC6201P182PRN 1.8v regulator	sicr
DDS Assy	XC6201P182PRN	IC4	SOT-89	XC6201P182PRN 1.8v regulator	sicr
DDS Assy	XC6201P332PR	IC2	SOT-89	XC6201P332PR 3.3v regulator	sicr
PnM Control	16F627	IC28	DIP-18	PIC 16F627 (programmed, see STAR)	sicu
Timer	16F627	IC11	DIP-18	PIC 16F627 (programmed, see STAR)	sicu
PnM Control	16F876-20 I/SP or /SP	IC3	DIP28	PIC (Programmed, see STAR)	sicu
PnM Control	24LC256	IC10	SOIC (smd)	use one type only for 24LC256	sicu
PnM Control	24LC256	IC10A	DIP 8	use one type only for 24LC256	sicu
DSP board	27C512	IC26	DIP28	27C512 EPROM (programmed with GMON.HEX)	sicu
DSP board	ADSP-2181	IC27	PQFP128	SEE STAR FOR EXACT PART NUMBER !	sicu
Timer	NDT2955	TR10	SOT-223	NDT2955 smd part	sicu
Timer	NDT2955	TR11	SOT-223	NDT2955 smd part	sicu
Timer	NDT2955	TR9	SOT-223	NDT2955 smd part	sicu
20W PA	RD16HHF1	Q4	TO-220	FET (Mitsubishi) "RF Parts" in USA US\$4.16	stfe
20W PA	RD16HHF1	Q5	TO-220	FET (Mitsubishi) "RF Parts" in USA US\$4.16	stfe
20W PA	RDO6HHF1	Q2	TO-220-123	FET (Mitsubishi) "RF Parts" in USA US\$3.95	stfe
20W PA	RDO6HHF1	Q3	TO-220-123	FET (Mitsubishi) "RF Parts" in USA US\$3.95	stfe

In VK , Rockby have them

see notes at start also

see notes at start also

see notes at start also

eg Farnell 9755349

eg Farnell 9593853

eg Farnell 9593853

eg Farnell 9593853

eg Farnell 9593853

eg Farnell 9593853

eg Farnell 9593853

eg Farnell 9593853

eg Farnell 9593853

eg Farnell 7203730

eg Farnell 7203730

NOTE correct fitting on web page

eg Farnell 959-3829

Farnell 9490213

FARNELL 110-6655

FARNELL 110-6655

FARNELL 360-5711

DIP part is preferred.

Jaycar (AUS)

(27C256 CAN BE USED ALSO)

Farnell

Farnell

Farnell

<http://www.rfparts.com/>

<http://www.rfparts.com/>

<http://www.rfparts.com/>

<http://www.rfparts.com/>

min order \$25 stfe

Last updated on 9th Nov 2007

IF board	J310	TR1	TO-92a	FET type J310	often seen on Ebay	stfj
MR pcb	J310	TR1	TO-92A	FET type J310	often seen on Ebay	stfj
MR pcb	J310	TR2	TO-92A	FET type J310	often seen on Ebay	stfj
MR pcb	J310	TR3	TO-92A	FET type J310	often seen on Ebay	stfj
MR pcb	J310	TR4	TO-92A	FET type J310	often seen on Ebay	stfj
DDS Filter	BC517	TR1	TO-92	darlington transistor eg Farnell 101-7671	Farnell	strd
MR pcb	BC517	TR5	TO-92A	darlington transistor eg Farnell 101-7671	Farnell	strd
MR pcb	BC517	TR6	TO-92A	darlington transistor eg Farnell 101-7671	Farnell	strd
PnM Control	BC517	TR507	TO-92	darlington transistor eg Farnell 101-7671	Farnell	strd
PnM Control	BC517	TR508	TO-92	darlington transistor eg Farnell 101-7671	Farnell	strd
PnM Butler	TIP122	TR103	TO-220		TIP123 as alternative?	strd
PnM Butler	2N3866	TR3	TO-39	2N5109 possible alternate part		strj
IF board	2N3904	TR12	TO-92	NPN transistor		strj
IF board	2N3904	TR3	TO-92	NPN transistor		strj
IF board	2N3904	TR4	TO-92	NPN transistor		strj
MR pcb	2N3904	QX1	TO-92	NPN transistor		strj
MR pcb	2N3904	QX2	TO-92	NPN transistor		strj
Beeper board	2N3906	Q1	TO-92	PNP transistor		strj
IF board	2N3906	TR6	TO-92	PNP transistor		strj
PnM Control	BC327	TR10	TO-92	PNP transistor	BC328 possibly usable?	strj
PnM Control	BC327	TR5	TO-92	PNP transistor	BC328 possibly usable?	strj
PnM Control	BC327	TR6	TO-92	PNP transistor	BC328 possibly usable?	strj
PnM Control	BC327	TR7	TO-92	PNP transistor	BC328 possibly usable?	strj
PnM Control	BC327	TR8	TO-92	PNP transistor	BC328 possibly usable?	strj
PnM Control	BC327	TR9	TO-92	PNP transistor	BC328 possibly usable?	strj
IF board	BC548	TR1X	TO-92	Used in Colpitts Osc.		strj
PnM Butler	MPSH10	TR101	TO-92	note pinout is different to other transistors but pcb is OK! often seen on Ebay		strj
PnM Butler	MPSH10	TR102	TO-92	note pinout is different to other transistors but pcb is OK! often seen on Ebay		strj
20W PA	ZTX313	Q1	TO-39-CBE	for substitute, refer to Steves web site (possibly a 2N2222a ?)		strj

Note 1

Farnell 9949585 (or Altronics (VK) S4113 looks OK cheaper also)

Nebraska Surplus sales have a 5V version which could be used if a 5V regulator is used to supply the PCB.

DDS CARRIER
DDS CARRIER

Eg. Pins from a dismantled turned pin IC socket
This is part of the PCB, but needs suitable pins inserted. Refer to WEB PAGES

PICaSTAR "A" Panel parts only

PICnMIX Notes:

Butler regulators: 8 volts

Provision is made for 2 x 78L08 voltage regulators. The second one (IC1x) is optional to provide a separate 8v supply to the crystal heater. **NOTE this is not an approved modification but provided for flexibility.**

You will also need, at a minimum:-

PCB stock to surround the Butler oscillator. The PCB has exposed area for soldering the PCB shielding.

There is also provision to shield the entire Butler PCB. The surrounds of the PCB copper are exposed and allow PCB stock or tinplate to be soldered all around the PCB. You may need feedthru caps also to bring in the 12v etc.

Feedthrough cap at least ONE is needed for the 8v entry to the Butler shielded section.
TWO are need if you elect to fit a separate 8V regulator for the heater.

3 x 4 Keypad

Various types available and pinouts and also the WIDTH vary!!

NOTE: JK3 is where the Keypad connects
if you are lucky, your keypad may plug in directly. **Otherwise, you will need to DELETE JK3 and make a cable and solder it in.**

You will need to check YOUR keypad pinout against the overlay on the PCB

PICnMIX Keypad:- the Maplin JM09K is NOT pin compatible with this PCB . A cable is needed.

The Maplin and it seems many others, are also WIDER than the one used for the PCB.

At this time, the only Keypad I know that will fit without having to bend the STATUS LED's away from the keypad is one available from www.jaycar.com.au in Australia. Catalogue number SP0770

These parts are shown in the BOM above, but shown here to clarify these notes.

Optional for analogue S'Meter

Refer to C.S. drawing and STAR for wiring details.

as req'd TO DAI C3	rb.1/.2	polarized cap (vertical mounting) start with about 10uF	
3k3	R1	1206-0805 Resistor 1206 or 0805 SMD	
HEADER 4 PIN J6	SIP-4	header male 0.1" pitch x 4 pin	
100K trim pot BtRV1	TRIM-BOL	TRIM POT BOURNS 3306P or 3306F STYLE	Farnell etc.

Last updated on 9th Nov 2007

Optional only if external keyboard status LEDS usec

Only if you want to put STATUS leds elsewhere.

8WAY HEADEF J_STATUS

8pin

header male 0.1" pitch x 8 pin