

# 3 T830 VCO PCB

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# T830 VCO PCB Parts List (IPN 220-01176-01)

## How To Use This Parts List

The components listed in this parts list are divided into two main types: those with a circuit reference (e.g. C2, D1, R121, etc) and those without (miscellaneous and mechanical).

Those with a circuit reference are grouped by component type in numerical order. Each component entry comprises three or four columns: the circuit reference, variant number (if applicable), IPN and description. A number in the variant column indicates that this component is fitted only to that variant.

The miscellaneous and mechanical section lists the variant and common parts in IPN order.

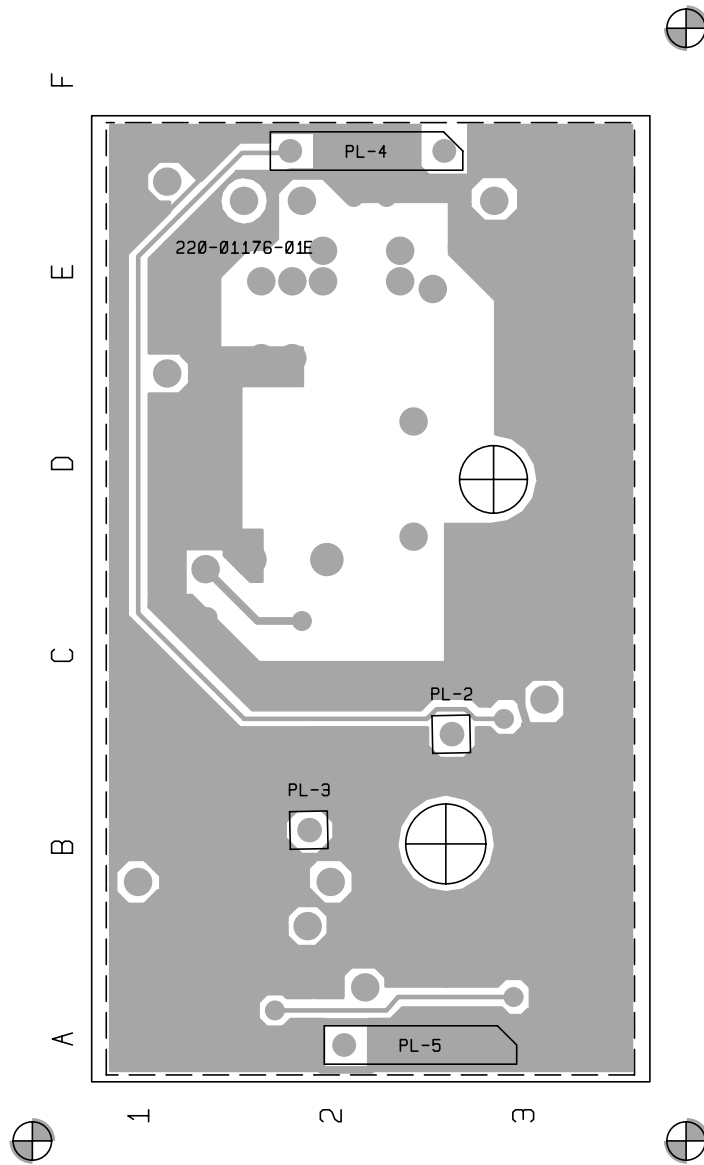
## Parts List Amendments

\*C26 Tx low changed from 56p (015-22560-01) to 100p to allow VCO loop voltage to achieve >5V at 136MHz (94/07-347).

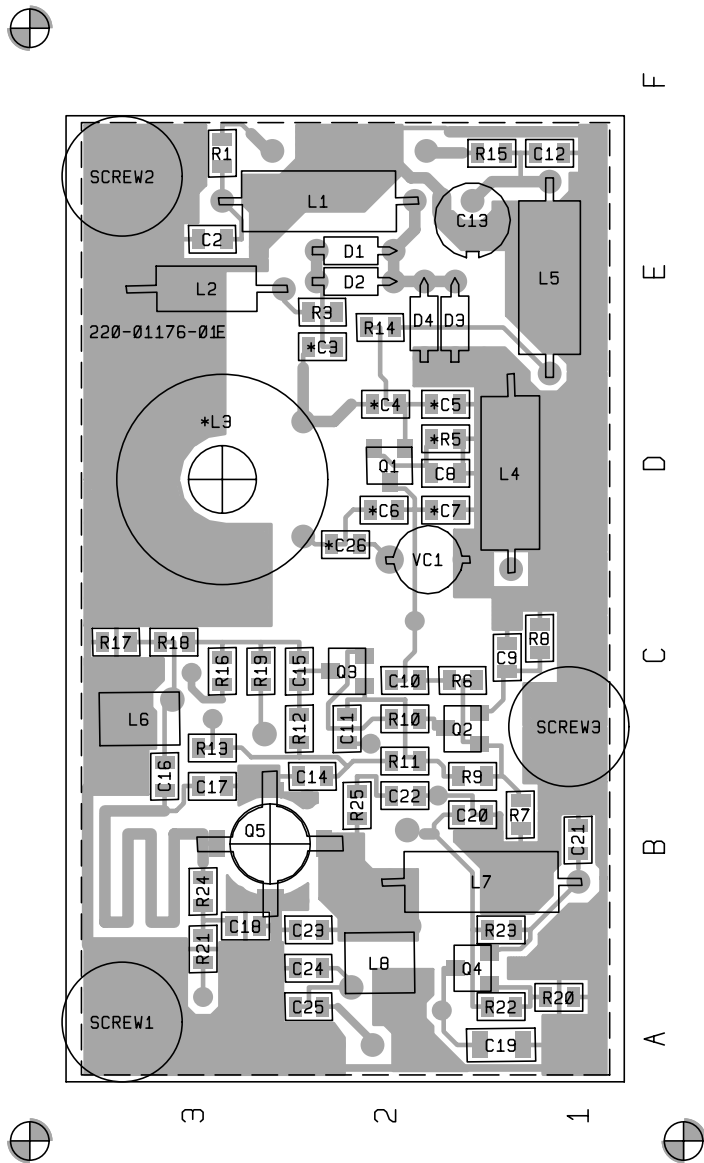
Ref	Var	IPN	Description	Ref	Var	IPN	Description																				
<table border="1"> <thead> <tr> <th>Variant Code</th> <th>Description</th> <th>T835 (MHz)</th> <th>T836/837 (MHz)</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Tx low</td> <td>-</td> <td>136 - 156</td> </tr> <tr> <td>B</td> <td>Tx high</td> <td>-</td> <td>148 - 174</td> </tr> <tr> <td>C</td> <td>Rx low</td> <td>157.4 - 177.4</td> <td>-</td> </tr> <tr> <td>D</td> <td>Rx high</td> <td>169.4 - 195.4</td> <td>-</td> </tr> </tbody> </table>				Variant Code	Description	T835 (MHz)	T836/837 (MHz)	A	Tx low	-	136 - 156	B	Tx high	-	148 - 174	C	Rx low	157.4 - 177.4	-	D	Rx high	169.4 - 195.4	-				
Variant Code	Description	T835 (MHz)	T836/837 (MHz)																								
A	Tx low	-	136 - 156																								
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C	Rx low	157.4 - 177.4	-																								
D	Rx high	169.4 - 195.4	-																								
CV1		028-02400-02	CAP TRIM 5/40P CER 5MM KV40001	D1		001-00012-63	(S) DIODE VARICAP BB809																				
C2		015-23680-08	CAP CER 0805 CHIP 680P 10% X7R 50V	D2		001-00012-63	(S) DIODE VARICAP BB809																				
*C3	A	015-22180-01	CAP CER 0805 CHIP 18P 5% NPO 50V	D3		001-00012-63	(S) DIODE VARICAP BB809																				
*C3	B	015-22180-01	CAP CER 0805 CHIP 18P 5% NPO 50V	D4		001-00012-63	(S) DIODE VARICAP BB809																				
*C3	C	015-22120-01	CAP CER 0805 CHIP 12P 5% NPO 50V	L1		056-00021-56	IND FXD 3.3UH AXIAL 10X4.2MM PHENOLIC																				
*C3	D	015-22120-01	CAP CER 0805 CHIP 12P 5% NPO 50V	L2		056-00021-60	IND FXD 330NH 6.6X2.7MM AXIAL NON MAGNETI																				
*C4	A	015-22180-01	CAP CER 0805 CHIP 18P 5% NPO 50V	*L3	A	055-01004-00	COIL TOROID 103NH 22P 9T T830 TX																				
*C4	B	015-22150-01	CAP CER 0805 CHIP 15P 5% NPO 50V	*L3	B	055-01004-00	COIL TOROID 103NH 22P 9T T830 TX																				
*C4	C	015-22120-01	CAP CER 0805 CHIP 12P 5% NPO 50V	*L3	C	055-01004-00	COIL TOROID 103NH 22P 9T T830 TX																				
*C4	D	015-22120-01	CAP CER 0805 CHIP 12P 5% NPO 50V	*L3	D	055-01003-00	COIL TOROID 91NH 22P 8T T830 RX																				
*C5	A	015-22220-01	CAP CER 0805 CHIP 22P 5% NPO 50V	L4		056-00021-52	IND FXD 820NH 10% NON MAGNETIC																				
*C5	B	015-22220-01	CAP CER 0805 CHIP 22P 5% NPO 50V	L5		056-00021-56	IND FXD 3.3UH AXIAL 10X4.2MM PHENOLIC																				
*C5	C	015-22220-01	CAP CER 0805 CHIP 22P 5% NPO 50V	L6		052-08135-35	COIL A/W 3.5T/3.5MM HOR 0.8MM WIRE																				
*C5	D	015-22180-01	CAP CER 0805 CHIP 18P 5% NPO 50V	L7		056-00021-56	IND FXD 3.3UH AXIAL 10X4.2MM PHENOLIC																				
*C6	A	015-22150-01	CAP CER 0805 CHIP 15P 5% NPO 50V	L8		052-08130-45	COIL A/W 4.5T/3.0MM HOR 0.8MM WIRE																				
*C6	B	015-22150-01	CAP CER 0805 CHIP 15P 5% NPO 50V	Q1		000-10003-10	(S) XSTR SMD MMBFJ310 JFET SOT-23 UHF																				
*C6	C	015-22120-01	CAP CER 0805 CHIP 12P 5% NPO 50V	Q2		000-10057-10	(S) XSTR SMD MMBR571 NPN SOT-23 UHF LO PW																				
*C6	D	015-22120-01	CAP CER 0805 CHIP 12P 5% NPO 50V	Q3		000-10057-10	(S) XSTR SMD MMBR571 NPN SOT-23 UHF LO PW																				
*C7	A	015-22150-01	CAP CER 0805 CHIP 15P 5% NPO 50V	Q4		000-10008-57	(S) XSTR SMD BCW70 PNP SOT23 AF SML SIG																				
*C7	B	015-22150-01	CAP CER 0805 CHIP 15P 5% NPO 50V	Q5		000-00032-47	(S) XSTR MRF559 NPN XPACK UHF PWR 0.5W																				
*C7	C	015-22220-01	CAP CER 0805 CHIP 22P 5% NPO 50V	R1		036-12220-00	RES M/F 0805 CHIP 22E 5%																				
*C7	D	015-22220-01	CAP CER 0805 CHIP 22P 5% NPO 50V	R3		036-11470-00	RES M/F 0805 CHIP 4E7 10%																				
C8		015-23120-01	CAP CER 0805 CHIP 120P 5% NPO 50V	*R5	A	036-13390-00	RES M/F 0805 CHIP 390E 5%																				
C9		015-23680-08	CAP CER 0805 CHIP 680P 10% X7R 50V	*R5	B	036-13390-00	RES M/F 0805 CHIP 390E 5%																				
C10		015-21220-01	CAP CER 0805 CHIP 2P2 +/-0.25P NPO 50V	*R5	C	036-13330-00	RES M/F 0805 CHIP 330E 5%																				
C11		015-23680-08	CAP CER 0805 CHIP 680P 10% X7R 50V	*R5	D	036-13270-00	RES M/F 0805 CHIP 270E 5%																				
C12		015-23680-08	CAP CER 0805 CHIP 680P 10% X7R 50V	R6		036-12560-00	RES M/F 0805 CHIP 56E 5%																				
C13		025-08100-02	CAP TANT BEAD 10M 10% 16V	R7		036-14100-00	RES M/F 0805 CHIP 1K 5%																				
C14		015-23680-08	CAP CER 0805 CHIP 680P 10% X7R 50V	R8		036-12560-00	RES M/F 0805 CHIP 56E 5%																				
C15		015-23680-08	CAP CER 0805 CHIP 680P 10% X7R 50V	R9		036-14100-00	RES M/F 0805 CHIP 1K 5%																				
C16		015-22560-01	CAP CER 0805 CHIP 56P 5% NPO 50V	R10		036-12100-00	RES M/F 0805 CHIP 10E 5%																				
C17		015-22560-01	CAP CER 0805 CHIP 56P 5% NPO 50V	R11		036-14270-00	RES M/F 0805 CHIP 2K7 5%																				
C18		015-23680-08	CAP CER 0805 CHIP 680P 10% X7R 50V	R12		036-13180-00	RES M/F 0805 CHIP 180E 5%																				
C19		015-05470-08	CAP CER 1206 CHIP 47N 10% X7R 50V	R13		036-12220-00	RES M/F 0805 CHIP 22E 5%																				
C20		015-23680-08	CAP CER 0805 CHIP 680P 10% X7R 50V	R14		036-12560-00	RES M/F 0805 CHIP 56E 5%																				
C21		015-23680-08	CAP CER 0805 CHIP 680P 10% X7R 50V	R15		036-12220-00	RES M/F 0805 CHIP 22E 5%																				
C22		015-23680-08	CAP CER 0805 CHIP 680P 10% X7R 50V	R16		036-13270-00	RES M/F 0805 CHIP 270E 5%																				
C23		015-21820-01	CAP CER 0805 CHIP 8P2 +/-0.25P NPO 50V	R17		036-13270-00	RES M/F 0805 CHIP 270E 5%																				
C24		015-21680-01	CAP CER 0805 CHIP 6P8 +/-0.25P NPO 50V	R18		036-12180-00	RES M/F 0805 CHIP 18E 5%																				
C25		015-23680-08	CAP CER 0805 CHIP 680P 10% X7R 50V	R19		036-14100-00	RES M/F 0805 CHIP 1K 5%																				
*C26	A	015-23100-01	CAP CER 0805 CHIP 100P 5% NPO 50V	R20		036-14680-00	RES M/F 0805 CHIP 6K8 5%																				
*C26	B	015-22330-01	CAP CER 0805 CHIP 33P 5% NPO 50V	R21		036-14100-00	RES M/F 0805 CHIP 1K 5%																				
*C26	C	015-22330-01	CAP CER 0805 CHIP 33P 5% NPO 50V	R22		036-14220-00	RES M/F 0805 CHIP 2K2 5%																				
*C26	D	015-22330-01	CAP CER 0805 CHIP 33P 5% NPO 50V	R23		036-12180-00	RES M/F 0805 CHIP 18E 5%																				
				R24		036-12220-00	RES M/F 0805 CHIP 22E 5%																				
				R25		036-13220-00	RES M/F 0805 CHIP 220E 5%																				

Ref	Var	IPN	Description	Ref	Var	IPN	Description
		220-01176-01	PCB T830 VCO				
		240-00025-36	PLUG 32WAY 1ROW PC MTG HARWIN PL-1 PL-2				
		345-00040-10	SCREW M3*6MM PAN POZI ST BZ				
		345-00060-08	SCREW M5 X 16 CHEESE SLOT PLASTIC T800 TO				
		350-00016-42	SPACER 5MM HI 8MM X M3 STUD 2.5MM X M3 HO				
		352-00010-14	NUT M5 HEX PLASTIC T800 TOROID				
		353-00010-10	WASHER M3 FLAT 7MM*0.6MM ST BZ				
		353-00010-13	WASHER M3 SHAKEPROOF INT BZ				
		353-00010-41	WASHER M6 NYLON BULTE LOCK T800 TOROID				





**T830 VCO PCB (IPN 220-01176-01) - Bottom Side**



T830 VCO PCB (IPN 220-01176-01) - Top Side

