

## Crossing Vectron/Microsemi to Q-Tech

Since many of our customers are very concerned about the acquisition from Vectron through Microsemi, here is an easy way how to get a second source. Alternatively, you can send us your Vectron parts and we will send you a list with Pin-to-Pin alternatives from Q-Tech:

1. Q-Tech understands the Vectron product line. Q-Tech's president, Technical Officer, and a Director were long time Vectron employees. Not only are they familiar with the Vectron product line, in many cases, they designed the Vectron products, data sheets and part number systems.
2. Q-Tech's affordable miniature oscillators are known for high reliability. Configuration controlled. Specified to temperature ranges as wide as -55 to +125°C.
3. Q-Tech's miniature surface mount XO's, VCXOs, and TCXOs are readily available. Lead time is 8 weeks maximum for first time orders and 2 weeks maximum for subsequent repeat orders. Fast delivery on all prototypes.
4. Q-Tech is a stable company. Q-Tech is family owned, has no debt and is emphatically not for sale.
5. Q-Tech is growing and continues to invest in new facilities. A new 25,000 sq. ft. building has recently been added and the size of the technical staff is increasing.
6. Q-Tech products offer a performance advantage. Our oscillators are often better than the products from competition, especially for low phase noise and jitter.
7. Q-Tech offers an easy transition from Vectron products. Q-Tech part numbers are readily cross referenced to Vectron part numbers.
8. Q-Tech rarely, if ever, discontinues products. It is the policy of the corporation to avoid product obsolescence whenever possible.



	<b>Vectron</b>	<b>Q-Tech</b>
<b>Clocks</b>	VCC1	QTCC570
	VC-801	QTCC350
	VC-820	QTCC230
<b>VCXOs</b>	VV-701, VVC1, VX-705	QTCV570
	VV-800, VVC4, VX-805	QTCV350
<b>PECL clocks</b>	VCC6	QTCC576
	VC-806	QTCC356
<b>TCXOs</b>	VT-704 (VTC1, VT-701)	QTCT570
	VT-800 (VTC4, VT-804)	QTCT350
	VT-820	QTCT230

If you are using Rad Hard Oscillators from Vectron, please contact us:

**Q-Tech Corporation**  
Phone: (310) 836-7900  
Email: [sales@q-tech.com](mailto:sales@q-tech.com)  
Web: <https://www.q-tech.com>



**VCC1- B3B- xxMxxxxxxx**

**Product**  
5x7 Crystal Oscillator

**Power Supply**  
A: +5.0 Vdc, 15pF  
B: +3.3 Vdc, 15pF  
C: +3.0 Vdc, 15pF  
E: +5.0 Vdc, 50pF  
F: +3.3 Vdc, 50pF  
G: +2.5 Vdc, 15pF  
H: +1.8 Vdc, 15pF

**Electrical Options:**  
**3: Tri-state 45/55% Duty Cycle**  
*The following codes are not recommended for new designs*  
0: No Tri-state, 40/60% Duty  
1: Tri-state, 40/60% Duty  
2: No tri-state, 45/55% Duty  
5: Enable, 40/60% Duty  
6: Enable, 45/55% Duty

**Frequency in MHz**

**Stability**  
A: ±100ppm over -10/70°C  
B: ±50ppm over -10/70°C  
C: ±100ppm over -40/85°C  
D: ±50ppm over -40/85°C  
E: ±25ppm over -10/70°C  
F: ±25ppm over -40/85°C  
K: ±32ppm over -10/70°C  
O: ±32ppm over -40/85°C  
P: ±100ppm over -55/125°C  
R: ±50ppm over -55/125°C

**Ordering Information**

Sample part number  
**QTCC570LD12-50.000MHz**

QTCC570 L D 12 - 50.000MHz

**Logic & Supply Voltage:**  
AC = HCMOS +5.0V at 50pF  
HC = HCMOS +5.0V at 15pF  
LA = LVHCMOS +3.3V at 50pF  
L = LVHCMOS +3.3V at 15pF  
N = LVHCMOS +2.5V at 15pF  
R = LVHCMOS +1.8V at 15pF

**Output Frequency**  
50.000MHz

**Screening**  
Blank = Unscreened  
M = Per MIL-PRF-55310, Level B

**Tristate**  
D = Tristate

**Frequency vs. Temperature Code:**  
16 = ± 100ppm at -20°C to +70°C  
12 = ± 100ppm at -40°C to +85°C  
17 = ± 100ppm at -40°C to +125°C  
10 = ± 100ppm at -55°C to +125°C  
18 = ± 50ppm at -20°C to +70°C  
11 = ± 50ppm at -40°C to +85°C  
20 = ± 50ppm at -40°C to +125°C  
6 = ± 50ppm at -55°C to +105°C  
9 = ± 50ppm at -55°C to +125°C  
5 = ± 25ppm at -20°C to +70°C  
15 = ± 25ppm at -40°C to +85°C  
14 = ± 20ppm at -20°C to +70°C

Any Vectron Electrical Option cross to Q-TECH "D" Vectron VCC1 does not have a Screen option

VCC1-B3B-FREQ = QTCC570LD18-FREQ

VCC1-F3D-FREQ = QTCC570LAD11-FREQ

VCC1-B3R-FREQ = QTCC570LD9-FREQ

VCC1-E2F-FREQ = QTCC570ACD15-FREQ

**VC-801- E A W- K A A N- xxMxxxxxxx**

**Product**  
Crystal Oscillator

**Package**  
3.2x5 Ceramic

**Power Supply**  
D: +5.0Vdc  
E: +3.3Vdc  
H: +2.5Vdc  
J: +1.8Vdc

**Output**  
A: CMOS

**Temp Range**  
W: -10/70°C  
J: -20/70°C  
E: -40/85°C  
F: -40/105°C (±50 and ±100ppm)  
7: -40/125°C (±50 and ±100ppm)  
B: -55/105°C (±50 and ±100ppm)  
C: -55/125°C (±50 and ±100ppm)

**Frequency**  
M for MHz or  
K for kHz (32.768 kHz is available)

**Custom Options**  
N: Standard Option

**Load**  
A: 15pF  
B: 30pF  
C: 50pF

**Enable/Disable**  
A: Enable/Disable, Enable High

**Stability**  
E: ±20ppm  
F: ±25ppm  
H: ±32ppm  
K: ±50ppm  
S: ±100ppm

**Ordering Information**

Sample part number  
**QTCC350LD12-50.000MHz**

QTCC350 L D 12 - 50.000MHz

**Logic & Supply Voltage:**  
AC = HCMOS +5.0V at 50pF  
HC = HCMOS +5.0V at 15pF  
LA = LVHCMOS +3.3V at 50pF  
L = LVHCMOS +3.3V at 15pF  
N = LVHCMOS +2.5V at 15pF  
R = LVHCMOS +1.8V at 15pF

**Output Frequency**  
50.000MHz

**Screening**  
Blank = Unscreened  
M = Screening per MIL-PRF-55310

**Tristate**  
D = Tristate

**Frequency vs. Temperature Code:**  
16 = ± 100ppm at -20°C to +70°C  
12 = ± 100ppm at -40°C to +85°C  
17 = ± 100ppm at -40°C to +125°C  
10 = ± 100ppm at -55°C to +125°C  
18 = ± 50ppm at -20°C to +70°C  
11 = ± 50ppm at -40°C to +85°C  
20 = ± 50ppm at -40°C to +125°C  
6 = ± 50ppm at -55°C to +105°C  
9 = ± 50ppm at -55°C to +125°C  
5 = ± 25ppm at -20°C to +70°C  
15 = ± 25ppm at -40°C to +85°C  
14 = ± 20ppm at -20°C to +70°C

Vectron VC-801 does not have a Screen option

VC-801-EAJ-KAAN-FREQ = QTCC350LD18-FREQ

VC-801-EAE-KACN-FREQ = QTCC350LAD11-FREQ

VC-801-EAC-KAAN-FREQ = QTCC350LD9-FREQ

VC-801-DAE-FACN-FREQ = QTCC350ACD15-FREQ

**VC-820- E A W- K A A N- xxMxxxxxxx**

**Product**  
Crystal Oscillator

**Package**  
2.5x3.2 Ceramic

**Power Supply**  
E: +3.3Vdc  
H: +2.5Vdc  
J: +1.8Vdc

**Output**  
A: CMOS

**Temp Range**  
W: -10/70°C  
E: -40/85°C  
F: -40/105°C (±50 and ±100ppm only)  
7: -40/125°C (±50 and ±100ppm only)  
B: -55/105°C (±50 and ±100ppm only)

**Frequency in MHz, or K for kHz**

**Custom Options**  
N: Standard Option

**Load**  
A: 15pF

**Enable/Disable**  
A: Enable/Disable, Enable High

**Stability**  
E: ±20ppm  
F: ±25ppm  
K: ±50ppm  
S: ±100ppm

**Ordering Information**

Sample part number  
**QTCC230LD12-50.000MHz**

QTCC230 L D 12 - 50.000MHz

**Logic & Supply Voltage:**  
L = LVHCMOS +3.3V at 15pF  
N = LVHCMOS +2.5V at 15pF  
R = LVHCMOS +1.8V at 15pF

**Output Frequency**  
50.000MHz

**Screening**  
Blank = Unscreened  
M = Per MIL-PRF-55310, Level B

**Tristate**  
D = Tristate

**Frequency vs. Temperature Code:**  
16 = ± 100ppm at -20°C to +70°C  
12 = ± 100ppm at -40°C to +85°C  
17 = ± 100ppm at -40°C to +125°C  
10 = ± 100ppm at -55°C to +125°C  
18 = ± 50ppm at -20°C to +70°C  
11 = ± 50ppm at -40°C to +85°C  
20 = ± 50ppm at -40°C to +125°C  
6 = ± 50ppm at -55°C to +105°C  
9 = ± 50ppm at -55°C to +125°C

Vectron VC-820 does not have a Screen option

VC-820-EAJ-KAAN-FREQ = QTCC230LD18-FREQ

VC-820-EAE-KACN-FREQ = QTCC230LAD11-FREQ

VC-820-EAC-SAAAN-FREQ = QTCC230LD10-FREQ

VC-820-DAE-FACN-FREQ = QTCC230ACD15-FREQ