

ECS INC. Programmable Oscillators

The ability to create a custom oscillator to certain specifications provides engineers with a great deal of flexibility. They allow for last minute changes in circuitry or design. ECS Blanks are "Twice Programmable". This is a cost saving feature which allows you to reprogram the same part to different specifications. ECS Programmable Oscillators are available in five different package styles: 3.2 x 5.0 SMD, 5.0 x 7.5 SMD, 9.0 x 14.0 SMD, Half

Size Dip and Full Size Dip Package. Frequency ranges are available from 1MHz - 125MHz in 3.3V and 1MHz - 150MHz in 5V* and in ±50ppm** and ±100ppm Frequency Stability Options.
 *3.2 x 5.0 SMD package: Frequency range 1MHz - 125MHz in 5V.
 **±50ppm not available in Extended Temperature Range Option.

Fig. 1 — P5 Type

Pin Connection	
1	Tri-State
2	Gnd
3	Output
4	Vcc

Fig. 2 — P7 Type

Pin Connection	
1	Tri-State
2	Gnd
3	Output
4	Vcc

Fig. 3 — P8F Type

Pin Connection	
1	Tri-State
2	Gnd
3	Output
4	Vcc

Fig. 4 — P8 Type

Pin Connection	
1	Tri-State
4	Gnd
5	Output
8	Vcc

Fig. 5 — P14 Type

Pin Connection	
1	Tri-State
7	Gnd
8	Output
14	Vcc

How to Select a Base Part Number:

#1	Select Part Type
#2	Select Output Voltage
#3	Select Frequency Tolerance / Operating Temperature

† Call Digi-Key with your Selected Base Part Number, and a Sales Representative will enter your desired frequency.

Programmable parts are non-cancelable and non-returnable!

Example Part Number:
 ECS [] [] - [] [] -ND

#1	Part Type	#2	Output Voltage	#3	Frequency Tolerance (Operating Temperature)
P5	3.2 x 5.0 mm	3	3.3V	A	±100ppm (0°C - 70°C)
P7	5.0 x 7.0 mm	5	5V	AN	±100ppm (40°C - 85°C)
P8F	9.0 x 14.0 mm			B	±50ppm (0°C - 70°C)
P8	8 Pin Dip				
P14	14 Pin Dip				

Fig.	Digi-Key Part No.	Price Each				ECS Part No.
		1	10	50	100	
Surface Mount — RoHS Compliant						
1	ECS-P5[]-[]-ND	12.38	10.61	7.78	7.07	ECS-UPO-3X5
2	ECS-P7[]-[]-ND	7.60	6.52	4.78	4.35	ECS-UPO-5X7
3	ECS-P8F[]-[]-ND	8.54	7.33	5.37	4.89	ECS-UPO-8FX
Through Hole						
4	ECS-P8[]-[]-ND	7.60	6.52	4.78	4.35	ECS-UPO-8PIN
	ECS-P8[]-[]X-ND◆	7.60	6.52	4.78	4.35	ECS-UPO-8PINX
5	ECS-P14[]-[]-ND	7.60	6.52	4.78	4.35	ECS-UPO-14PIN
	ECS-P14[]-[]X-ND◆	7.60	6.52	4.78	4.35	ECS-UPO-14PINX

◆ RoHS Compliant

CrystalPro Oscillator Programming System

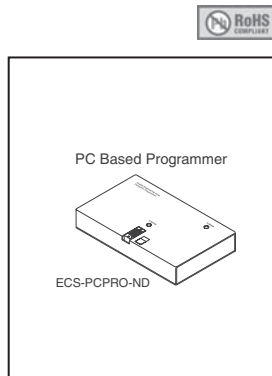
Programmer

Designed specifically to program oscillator devices, the CrystalPro is a fast, accurate, low cost solution for your low to mid volume programming needs. Software and firmware upgrades can be downloaded off the web to support future parts from manufacturers and new technologies such as programmable TCXO and VCXO devices.

The user-friendly CrystalWindow graphical interface insures complete and valid part specification and fast part type switching. Attaches to any Windows PC via standard serial port.

Features:

- Fast - average programming is less than two seconds.
- Accurate frequency at time of programming cycle is within 5ppm.
- Simple - just select part number, type in desired frequency and click PROGRAM.
- Flexible - handling devices up to 250MHz and LVTTTL/CMOS/ECL/PECL I/O technologies, the CrystalPro is designed to handle tomorrow's technologies as they become available.



Description	Digi-Key Part No.	Price Each
PC Based Programmer	ECS-PCPRO-ND	991.71

Blank Oscillator

Description	Digi-Key Part No.	Price Each
Blank Oscillator, 3 x 5 SMD	ECS-UPO-3X5-ND◆	8.25
Blank Oscillator, 5 x 7 SMD	ECS-UPO-5X7-ND◆	5.07
Blank Oscillator, Full Size	ECS-UPO-14PINX-ND◆	5.07
Blank Oscillator, Full Size	ECS-UPO-14PIN-ND	5.07
Blank Oscillator, Half Size	ECS-UPO-8PINX-ND◆	7.27
Blank Oscillator, Half Size	ECS-UPO-8PIN-ND	7.27
Blank Oscillator	ECS-UPO-8FX-ND◆	5.70

◆ RoHS Compliant

Adapter

Description	Digi-Key Part No.	Price Each
Adapter, 3 x 5 SMD	ECS-UPO-3X5-FXT-ND	98.47
Adapter, 5 x 7 SMD	ECS-UPO-5X7-FXT-ND	75.75
Adapter for Plastic Oscillator	ECS-UPO-8F-FXT-ND◆	30.30

◆ RoHS Compliant

Free shipping on orders over \$200 CAD! All prices in Canadian dollars and include duty and brokerage fees.

1482 (CA2011)

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