



### KEY BENEFITS:

- Reduced part count, board space, BOM cost, and lead times
- Low jitter and skew
- Selectable frequencies for different applications
- Spread spectrum capability for EMI reduction
- PCI® Express Gen 1/2/3
- Integrated terminations
- 1.8 to 3.3 V – minimizes power and eliminates the need for I/O level translation
- All major signaling levels supported
- Very-low active and standby power
- Small packaging
- Compatible with Freescale V<sub>High</sub> specification on differential clocks
- Automotive-grade available

IDT has the industry’s broadest portfolio of timing solutions, supporting applications in communications, computing and consumer markets. With products that uniquely complement Freescale™ i.MX designs, IDT provides the design expertise, reliability and delivery necessary to achieve design success. The information to the left and below identifies current IDT timing solutions for Freescale i.MX designs.

### TARGET MARKETS AND APPLICATIONS:

- Auto Infotainment
- Consumer
- Connected Home
- Wearables
- Industrial
- Fitness and Health

### OTHER COMPANION PRODUCTS:

- 1894K-32LF 10/100 Ethernet PHY
  - Wireless Power Solutions
- [Learn more at IDT.com/go/wireless](http://IDT.com/go/wireless)

To request samples, download documentation or learn more visit: [idt.com/go/timing](http://idt.com/go/timing)

## Low-Power VersaClock® LP and VersaClock 5 Programmable Clocks

Part Number	Input Type	# of Frequencies	# of Outputs	Output Type	VDD (V)	Package	i.MX Family	Target Applications
5P49V5923 5P49V5925 5P49V5927 5P49V5929	XTAL ICLK	3 to 5 (includes REF)	3 to 9	LVC MOS	1.8 to 3.3	4 x 4 mm QFN	i.MX2 i.MX3 i.MX5 i.MX6 i.MX7	Auto Infotainment, Consumer, Connected Home, Industrial, Healthcare/Fitness
5P49EE502 5P49EE602 5P49EE802	XTAL ICLK TCXO	5 to 8	5 to 8	LVC MOS	1.8 to 3.3	3 x 3 mm QFN 3 x 3 mm QFN 4 x 4 mm QFN		Auto Infotainment, Consumer, Connected Home, Industrial, Healthcare/Fitness, Wearables

## Very-Low-Power PCI Express® Gen 1/2/3 Clock Generators

Part Number	Input Type	# of Frequencies	# of PCIe Outputs	Output Type	VDD (V)	Package	i.MX Family	Target Applications
9FGV0241 9FGV0441 9FGV0641 9FGV0841	XTAL ICLK	2 (includes REF)	2 to 8	LP-HCSL, AC-LVDS*, AC-CML*, AC-LVPECL*	1.8	4 x 4 mm QFN 5 x 5 mm QFN 5 x 5 mm QFN 6 x 6 mm QFN	i.MX6	Auto Infotainment, Consumer, Connected Home, Industrial, Healthcare/Fitness

## Low-Power PCI Express Gen 1/2/3 Clock Generators

Part Number	Input Type	# of Frequencies	# of PCIe Outputs	Output Type	VDD (V)	Package	i.MX Family	Target Applications
9FGL0241 9FGL0441 9FGL0641 9FGL0841	XTAL ICLK	2 (includes REF)	2 to 8	LP-HCSL, AC-LVDS*, AC-CML*, AC-LVPECL*	1.8	4 x 4 mm QFN 5 x 5 mm QFN 5 x 5 mm QFN 6 x 6 mm QFN	i.MX6	Auto Infotainment, Consumer, Connected Home, Industrial, Healthcare/Fitness

## High-Performance, Low-Power Crystal Oscillators (XO)

Part Number	Phase Jitter	Minimum Frequency	Maximum Frequency	Output Type	VDD (V)	Package	i.MX Family	Target Applications
XU-series XO	<400 fs (12 k to 20 M)	0.016 MHz	1500 MHz	LVDS, LVPECL, HCSL, HCMOS	1.8 to 3.3	5032, 7050	i.MX2 i.MX3 i.MX5 i.MX6 i.MX7	Auto Infotainment, Consumer, Connected Home, Industrial, Healthcare/Fitness
XL-series XO	<1 ps (12 k to 20 M)	0.75 MHz	1350 MHz	LVDS, LVPECL, HCMOS	2.5 to 3.3	3225, 5032, 7050		

\*AC prefix indicates that these logic levels are easily obtained with AC-coupling. See IDT Application note AN-891 for more details.

To request samples, download documentation or learn more visit: [idt.com/go/timing](http://idt.com/go/timing)