New Product Announcement

PI6CG33xxxx
PI6CB33xxxx

PCIe Gen 4 and Gen 5 Compliant Clock Products for Data Center and Server Applications

The PI6CG33xxxx and PI6CB33xxxx are PCIe clock generator and clock buffer families supporting PCIe Gen 4 and Gen 5 clock requirements.

The PI6CG33xxxx consists of 2-output, 4-output, 6-output, and 8-output clock generators. The PI6CB33xxxx consists of 2-output, 4-output, 6-output, 8-output, and 20-output clock buffers. Both families support HCSL outputs with on-chip termination for driving either 85Ω or 100Ω transmission lines.

The families use Diodes' proprietary PLL design to achieve jitter as low as 0.15ps, which is compliant with PCIe Gen 5 specifications. This makes the families ideal clock solutions for data centers, severs, storage, and network applications where the PCIe interface is used.

DIODES Advantage

PCIe Gen 4 and Gen 5 Compliant Clock Generator and Clock Buffer Families

- **Very Low Jitter to Support PCIe Gen 4/Gen 5 Interface**
  Timing solution designed for PCIe Gen 4 can be migrated to Gen 5 with no change, reducing time to market
- **Various Options in the Families—Number of Outputs and Different Output Impedance Support**
  Broad portfolio to meet different system requirements
- **On-Chip Termination**
  No need for external resistors—saves board space and reduces cost
- **Programmable Slew Rate and Output Amplitude for Each Output**
  Provides flexibility for the ease of board design and optimal performance

Applications

- Data Center/Server
- Storage
- Networking Systems Including Switches and Routers

New Product Announcement

PI6CG33xxxx
PI6CB33xxxx

Product Portfolio

Family	Part Number	# of Outputs	PCIe Gen4/Gen5 Support	Output Impedance	Voltage Support	Package
Clock Generator	PI6CG33201C	2	Y	100Ω	3.3V	24-TQFN (4mm x 4mm)
	PI6CG33202C	2	Y	85Ω	3.3V	24-TQFN (4mm x 4mm)
	PI6CG33401C	4	Y	100Ω	3.3V	32-TQFN (5mm x 5mm)
	PI6CG33402C	4	Y	85Ω	3.3V	32-TQFN (5mm x 5mm)
	PI6CG33601C	6	Y	100Ω	3.3V	40-TQFN (5mm x 5mm)
	PI6CG33602C	6	Y	85Ω	3.3V	40-TQFN (5mm x 5mm)
	PI6CG33801C	8	Y	100Ω	3.3V	48-TQFN (6mm x 6mm)
	PI6CG33802C	8	Y	85Ω	3.3V	48-TQFN (6mm x 6mm)
Clock Buffer	PI6CB33201	2	Y	100Ω	3.3V	24-TQFN (4mm x 4mm)
	PI6CB33202	2	Y	85Ω	3.3V	24-TQFN (4mm x 4mm)
	PI6CB33401	4	Y	100Ω	3.3V	32-TQFN (5mm x 5mm)
	PI6CB33402	4	Y	85Ω	3.3V	32-TQFN (5mm x 5mm)
	PI6CB33601	6	Y	100Ω	3.3V	40-TQFN (5mm x 5mm)
	PI6CB33602	6	Y	85Ω	3.3V	40-TQFN (5mm x 5mm)
	PI6CB33801	8	Y	100Ω	3.3V	48-TQFN (6mm x 6mm)
	PI6CB33802	8	Y	85Ω	3.3V	48-TQFN (6mm x 6mm)
	PI6CB332000	20	Y	85Ω	3.3V	72-TQFN (10x10mm)

Ordering Information

Family	MPN	MOQ
Clock Generator	PI6CG33201CZDIEX	3500
	PI6CG33202CZDIEX	3500
	PI6CG33401CZHIEX	2500
	PI6CG33402CZHIEX	2500
	PI6CG33601CZLAIEX	3500
	PI6CG33602CZLAIEX	3500
	PI6CG33801CZLIEX	3000
	PI6CG33802CZLIEX	3000

Family	MPN	MOQ
Clock Buffer	PI6CB33201ZDIEX	3500
	PI6CB33202ZDIEX	3500
	PI6CB33401ZHIEX	2500
	PI6CB33402ZHIEX	2500
	PI6CB33601ZLAIEX	3500
	PI6CB33602ZLAIEX	3500
	PI6CB33801ZLIEX	3000
	PI6CB33802ZLIEX	3000
	PI6CB332000ZDIEX	2500