




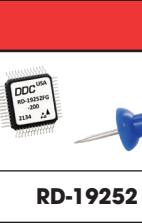
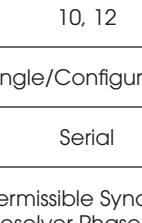
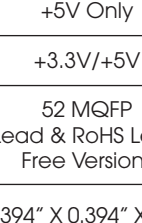
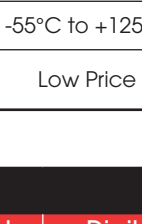

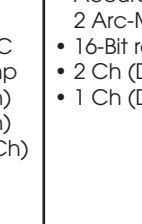


## Synchro, Resolver, RVDT, LVDT, Encoder, Hall, & MR Outputs to Digital Conversion

### Resolver-to-Digital Converters

Product					
Model Number	<b>RD-19231</b>	<b>RD-19241</b>	<b>RD-19232</b>	<b>RD-19252</b>	<b>RDC-19220/2/4 &amp; RDC-19220S/2S</b>
Accuracy (Arc-Minute)	1	8	1	5	2
Resolution (Bit) Programmable	10, 12, 14, 16	10, 12, 14	10, 12, 14, 16	10, 12	10, 12, 14, 16
Bandwidth	Dual/Configurable	Dual/Configurable	Dual/Configurable	Single/Configurable	Single/Configurable
Data Output	Parallel & AquadB	Parallel & AquadB	Serial & AquadB	Serial	Parallel
Synthesized Reference	Permissible Synchro/Resolver Phase Shift up to 45°	Permissible Synchro/Resolver Phase Shift up to 45°	Permissible Synchro/Resolver Phase Shift up to 45°	Permissible Synchro/Resolver Phase Shift up to 45°	Permissible Synchro/Resolver Phase Shift up to 45° (Only "S" option)
Power Supply	+5V Only	+5V Only	+5V Only	+5V Only	+5V Only
I/O Voltage	+3.3V/+5V	+5V Only	+3.3V/+5V	+3.3V/+5V	+5V Only
Package	64 MQFP Lead & RoHS Lead Free Versions	52 MQFP Lead & RoHS Lead Free Versions	52 MQFP Lead & RoHS Lead Free Versions	52 MQFP Lead & RoHS Lead Free Versions	40 DIP, 44 Pin J Lead, 44 MQFP Lead & RoHS Lead Free Versions
Size	0.52" X 0.52" X 0.1" (13.2mm X 13.2mm X 2.5mm)	0.394" X 0.394" X 0.1" (10.0mm X 10.0mm X 2.5mm)	0.394" X 0.394" X 0.1" (10.0mm X 10.0mm X 2.5mm)	0.394" X 0.394" X 0.1" (10.0mm X 10.0mm X 2.5mm)	0.394" X 0.394" X 0.1" (10.0mm X 10.0mm X 2.5mm)
Temperature	-40°C to +85°C	-55°C to +125°C	-40°C to +85°C	-55°C to +125°C	-55°C to +125°C
Special Feature	High Accuracy	Low Price	Serial Output	Low Price	MIL-PRF-38534

### Synchro and Resolver Special Function Components

Product						
Model Number	<b>DDC-XXXXX</b>	<b>210XX/520XX/XXXXX/B-XXXX</b>	<b>OSC-15801/2/3</b>	<b>SD-14531 SD-14620/SDC-14610</b>	<b>DSC-10510/ DRC-11522</b>	<b>SD-15901</b>
Details	<ul style="list-style-type: none"> <li>Precision 2Vrms outputs for 2/11.8/90Vrms applications</li> <li>0.02% tolerance (1LSB error in 16-bit resolution)</li> <li>Input Scott-T, Output Scott-T, and Reference Transformer configurations</li> <li>Ideal for COTS RD/RDC's above</li> </ul>	<ul style="list-style-type: none"> <li>Provides input or output voltage adjustment with angle accuracy up to 1 minute max</li> <li>Offers high input impedance up to 130kΩ</li> <li>Available in through-hole or surface-mount configurations</li> </ul>	<ul style="list-style-type: none"> <li>Configurable frequency 400 Hz to 20 kHz, scalable voltage</li> <li>Second Quadrature Reference output voltages for Inductosyn applications</li> <li>RAD tolerant version (OSC-15803)</li> </ul>	<ul style="list-style-type: none"> <li>Accuracy up to 1 Arc-Minute</li> <li>Pin configurable S/R input option</li> <li>14-Bit or 16-Bit resolution</li> <li>-55°C to +125°C Operating temp</li> <li>SD-14531 (1 Ch)</li> <li>SD-14620 (2 Ch)</li> <li>SDC-14610 (3 Ch)</li> </ul>	<ul style="list-style-type: none"> <li>7 VA Drive capability for CT, CDX, or TR loads (DSC-10510)</li> <li>Accuracy up to 2 Arc-Minutes</li> <li>16-Bit resolution</li> <li>2 Ch (DRC-11522)</li> <li>1 Ch (DSC-10510)</li> </ul>	<ul style="list-style-type: none"> <li>Up to 22 bits of angle resolution</li> <li>Achievable accuracy of sub 30 Arc-Seconds</li> <li>Configurable coarse/fine ratios, 1:4, 1:8, 1:16, 1:32, 1:64</li> <li>Real-time two-speed computation</li> <li>Ideal for COTS RD/RDC's above</li> </ul>

Note: For all components and cards, contact factory for MTBF reports

For more information on PDC's Synchro/Resolver solutions, please visit: [www.powerdevicecorp.com/SR](http://www.powerdevicecorp.com/SR)

# Synchro/Resolver Modules, Boards & Boxes

Product	Model Number	Details
<b>PCIe</b>		
 SB-3623    SB-3625	<b>SB-3623</b>	(4 or 6) 30-arc-seconds accurate output channels programmable for synchro or resolver output up to 90V LL with on board sine reference oscillator.
	<b>SB-3625</b>	(4 or 8) 1-arc-minute accurate input channels available for synchro or resolver feedback up to 90V LL.
<b>PCI</b>		
	<b>SB-3624</b>	(6) 1-arc-minute accurate input channels available for synchro or resolver feedback up to 90Vrms LL, with on board sine reference oscillator.
<b>PMC</b>		
 SB-3641    SB-3642 SB-3644	<b>SB-3641</b>	(4 or 8) 1-arc-minute accurate input channels available for synchro or resolver feedback up to 90Vrms LL.
	<b>SB-3642</b>	(4 or 8) 1-arc-minute accurate input channels available for synchro or resolver feedback up to 90Vrms LL, with discrete I/O and front panel connector.
	<b>SB-3644F</b>	(2 or 4) 1-arc-minute accurate output channels programmable for synchro or resolver (up to 90Vrms LL), with sine ref oscillator, discrete I/O & front panel connector.
<b>PC-104</b>		
 SB-3633    SB-3632 SB-3634    SB-3635	<b>SB-3633</b>	(4) 1-arc-minute accurate input channels available for synchro or resolver up to 90Vrms LL.
	<b>SB-3632</b>	(2) 1-arc-minute accurate output channels available for synchro or resolver output up to 11.8Vrms LL.
	<b>SB-3634</b>	Mates with SB-36320 output card to create 2 synchro 90V magnetic isolated output channels.
	<b>SB-3635</b>	5VA Sine Reference oscillator with programmable options for 400 to 8191 Hz and 2 to 123Vrms LL.
<b>cPCI</b>		
 6U SB-365X	<b>SB-365X</b>	(3 to 9) 2-arc-minute accurate input channels and (6) 2-arc-minute accurate output channels available for synchro or resolver up to 90Vrms LL.
 3U SB-3644	<b>SB-3644IT</b>	(2 or 4) 1-arc-minute accurate output channels programmable for synchro or resolver (up to 90Vrms LL), with sine ref oscillator, discrete I/O & front panel connector.
<b>USB</b>		
	<b>SB-3661</b>	(2) 1-arc-minute accurate input channels programmable for synchro or resolver feedback up to 90Vrms LL, with on-board sine reference oscillator.
<b>VME</b>		
	<b>SB-3611</b>	(3 to 12) 1-arc-minute accurate input channels available for synchro or resolver feedback up to 90v LL.
<b>Synchro Booster Amplifier</b>		
	<b>SBA-35XXX</b>	Features 90 V outputs at 60 Hz or 400 Hz with high efficiency, utilizing power from the reference supply. Provides protection against short circuits, overloading, transients, temperature, & reference supply shutdown. Smallest & lightest synchro booster available.
<b>Discrete Modules</b>		
 API    SIM	<b>SDC-63X, DSC-54X/644</b>	Features include Synchro/Resolver-to-Digital or Digital-to-Synchro/Resolver with built-in transformer options for both input and output variants respectively. Offers 14-bit resolution.
<b>Development Kits</b>		
 RD-19231EX    RD-19232EX	<b>RD-19231EX/RD-19241EX</b>	Easy on-card configurable features to start fast design-ins using parallel data output converters such as RD-19231FX or RD-19241FX converters.
	<b>RD-19232EX</b>	Easy on-card configurable features to start fast design-ins using the serial data output converters such as RD-19232FX converters .

Note: For all components and cards, contact factory for MTBF reports



For ordering assistance and technical support,

E-Mail: [service@powerdevicecorp.com](mailto:service@powerdevicecorp.com)

Visit: [www.powerdevicecorp.com](http://www.powerdevicecorp.com)

Call: HQ, N.Y., U.S.A

UK  
Germany  
India


 Power Device Corporation  
 1-800-332-5757 | (631) 333-7950  
 +44-(0)1635-811140  
 +49-(0)89-1500-12-11  
 +91-80-46797368

## If it Moves... Position it with PDC

The information in this document is believed to be accurate; however, no responsibility is assumed by PDC for its use, and no license or rights are granted by implication or otherwise in connection therewith. Specifications are subject to change without notice.

