



# Revolutionary ROSAs

## OVERVIEW

Gennum has broken away from the traditional approach to ROSA design and created a line of ROSA products that delivers the best performance in the industry. Gennum's ROSAs offer:

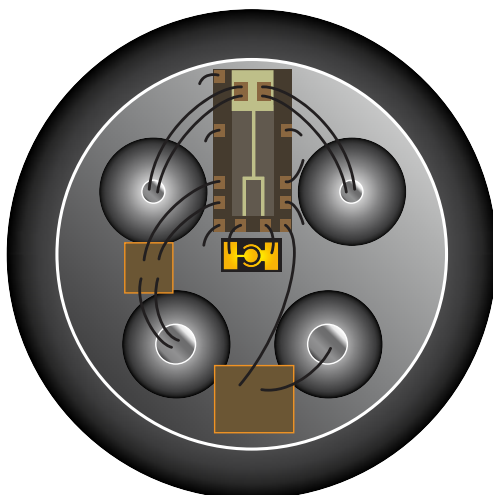
- Best-in-class stressed receiver sensitivity
- High gain to ensure exceptional crosstalk performance within the module
- Patented Rchip technology to ensure maximum module manufacturing yield
- Successful interoperability of the Gennum LRM ROSA with all leading EDC solutions for SFP+ modules

## RCHIP TECHNOLOGY: REVOLUTIONIZING THE ROSA FROM THE INSIDE OUT

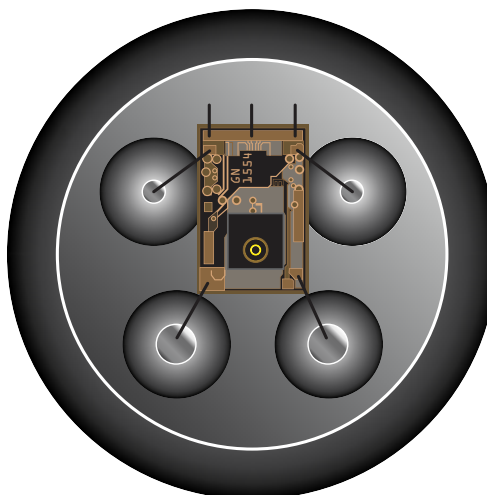
Traditional ROSA architecture, which typically include four or five discrete components, is vulnerable to wide performance variations across a number of parameters. This negatively impacts the manufacturing yield of the transceiver module. Building on its innovative technology practices, Gennum has leveraged its world-class Transimpedance Amplifier (TIA) design expertise and wafer scale processing to develop the Rchip, a die stack implementation of an optical receiver.

With the new Rchip architecture, Gennum is able to optimize the complete receiver at the silicon level. The result is a ROSA with exceptional performance that is insensitive to assembly variability and is guaranteed by design. The consistent high performance of each Gennum ROSA allows module manufacturers to enjoy larger performance margins in their designs and thus, benefit from maximal manufacturing yields.

Traditional Architecture



Gennum Rchip-based Architecture



## GENNUM ROSA PRODUCT PORTFOLIO

Gennum's complete line of ROSA products spans 850 nanometers (nm) to 1550 nm including limiting and linear (automatic gain control) functionality. Each of the new ROSA products feature Gennum's new Rchip packaged in a fully compliant SC or LC type optical subassembly.

### PRODUCTS

	Description	Primary Application
<b>GN3050</b>	10/11.3 Gb/s ROSA Long Wavelength 10km High Gain Receiver	10GBASE-LR SONET OC-192 SR-1
<b>GN3052</b>	10/11.3 Gb/s ROSA LRM Automatic Gain Control (AGC) Receiver	10GBASE-LRM SONET OC-192
<b>GN3150</b>	8.5 to 11.3 Gb/s ROSA 850 nm High Gain Receiver	10GBASE-SR 8G Fibre Channel
<b>GN3250</b>	10/11.3 Gb/s ROSA Long Wavelength 10/40km High Gain Receiver	10GBASE-LR 10GBASE-ER SONET OC-192 IR-2
<b>GN3352</b>	10/11.3 Gb/s APD ROSA Long wavelength 80km Receiver	10GBASE-ZR SONET OC-192 LR-2 DWDM

### SERVING THE NEEDS OF OPTICAL TRANSCEIVER VENDORS

The new ROSA component line complements Gennum's existing 10Gb/s offerings, including clock and data recovery (CDR) chips, laser/modulator drivers and limiting amplifiers. Gennum components are optimized for interoperability and together provide a proven solution for a variety of optical transceiver designs.

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#### LEARN MORE:

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