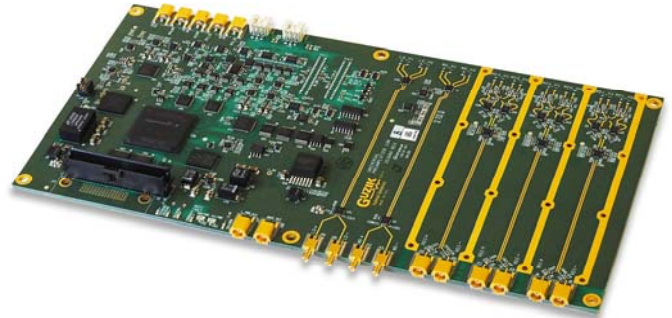


GUZIK PRODUCT BULLETIN

UNIVERSAL

PREAMPLIFIER 12M

- Write channel with data speed up to 8 Gbit/sec
- Laser channel with data speed up to 8 Gbit/sec
- Three read channels with 100 kHz to 3.5 GHz bandwidth
- Two channels dynamic TFC control
- Write data and laser data modulation signals with bandwidth up to 10 MHz



Universal Pre-amplifier 12M (UP12M) is designed for new generation of TDMR and HAMR Head Amplifiers. With new Guzik RWA4000 TDMR, UP12M allows to process signals from three Read Channels. It also supports two high speed data channels for Write data and Laser data. UP12M has two channels for dynamic TFC control and allows to program TFC power per sector and close loop TFC power control in each channel. UP12 can generate two programmable modulation signals for write data and laser data with bandwidth up to 10 MHz.

Universal Pre-amplifier 12M Specifications:

Write Channel & Laser channel

- Up to 8 Gbit/sec data speed
- 30 ps rise/fall time of write data (20-80%, typical)
- Positive +2.5V CML data outputs

TFC Control

- Dual channels TFC Control
- Maximum TFC Voltage: 4.5V
- Fully programmable dynamic TFC Control with possibility to program power on each sector
- Close loop TFC power control
- Bandwidth: DC to 10MHz
- 12 bit resolution

Head Amplifier control

- Real time control per sector

16 Mb SRAM Memory

- To store settings for real-time control of TFC, Headamplifier registers, Write current, and Laser modulation

Read Channel

- Bandwidth: 100kHz to 3.5 GHz at -3 dB
- Flatness: ± 0.2 dB to 1 GHz, ± 0.3 dB to 2 GHz
- Output: Differential
Nominal output level: 250 mV (SE, 50 Ohm termination)
- Typical Non-Linear Distortion: better than 1% (250 mV output level), full bandwidth
- Amplification 7 dB

Write & Laser current Modulation signals

- Max amplitude: 2 V p/p
- Output impedance: 2.5 Ohm
- Bandwidth: DC to 10MHz
- 12 bit resolution

Software Requirements

- WITE32 ver 4.50 or higher



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