

M SERIES

M7030 DDR/LPDDR Protocol Analyzer



High Data Rate Analyzer for Advanced Memory Debug and Validation

The M7030 is a high sampling rate logic analyzer and protocol analyzer solution for DDR/LPDDR interfaces. Achieving a sampling rate of up to 100 GS/s, this analyzer is ideal for the debug, compliance validation, and analysis of next generation memory interfaces, including HBM and GDDR. It monitors up to 36 signals across a full memory channel — both command/address and data — capturing every read/write with real-time timing and protocol insight. Using high-impedance active probing with dedicated interposers, the M7030 delivers deep visibility into next-generation DDR/LPDDR systems at 20,000 MT/s and beyond, without disturbing the signal.

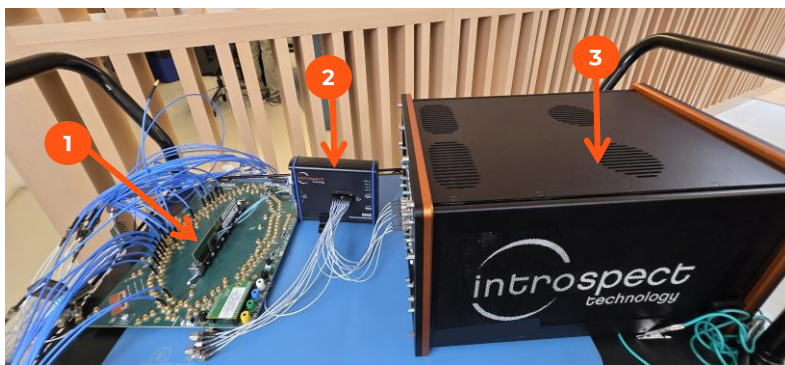
KEY FEATURES:

- **High-Level Analysis:** Turn complex DDR logic waveforms into readable commands and instantly flag timing violations
- **Track Any Clock Condition:** Seamlessly follow clock changes and keep capturing even when the clock stops—no resynchronization, no lost data
- **Measure the Data Bus:** One-shot triggering on command and capture data bus in parallel
- **Training-free Operation:** Live phase compensation skips controller training mode

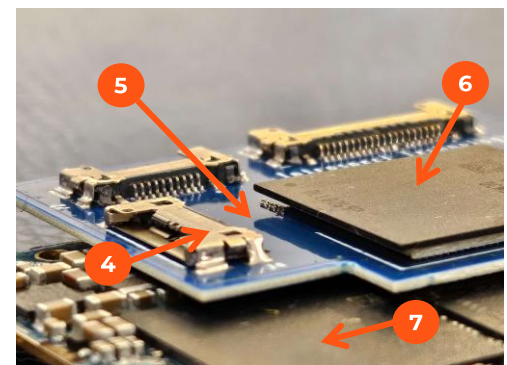
KEY BENEFITS:

- **Complete Data and Command Capture:** Modular design allows scaling to numerous simultaneous capture channels
- **Superior Signal Integrity:** Active probing results in high-bandwidth measurement and easier de-embedding of interposer losses
- **Faster, Easier Debug:** Electrical and protocol validation testing can occur with the same interposers and the same RSH active probe technology

Typical Application: Active Probing of Live Systems



DDR/LPDDR Validation Solution



LPDDR5 Interposer Solution

- ① Interposer with shielded cables result in high signal integrity
- ② RSH with interchangeable adapters for the probe amplifier
- ③ Analyzer with high-performance SMPM interface

- ④ Connectors for attaching to Remote Sampling Heads (RSH)
- ⑤ High-Performance Interposer with Embedded Active Probe Tip Resistors
- ⑥ LPDRAM Device in a 496-Pin PoP Package
- ⑦ Live Logic Board Underneath Interposer

