

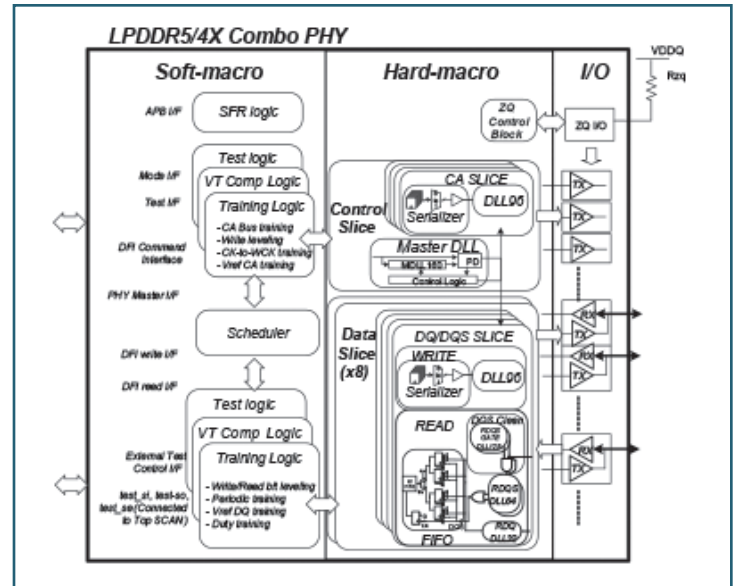
LPDDR5/4X PHY

Overview

The Samsung Foundry LPDDR combo PHY supports 6.4Gbps or LPDDR5/4.266Gbps LPDDR4 with a 16-bit 1-channel configuration. It is DFI4.0 compliant with frequency ratios of 1:4 and 1:2.

Key Features

- Samsung Foundry 10nm low power CMOS device technology
- Supports 4.266Gbps LPDDR4
- Supports 6.4Gbps LPDDR5
- Off-chip driver (OCD)
- Supports Retention IO
- On-die term (VSSQ-TERM)
- Auto training after memory initialization
 - o Command bus training
 - o Auto-DQS cleaning
 - o Write/Read bit training
 - o Vref CA/DQ training
- Power supply
 - o 0.75V or 0.85V PHY Core Voltage (Typ.)
 - o 0.6V for LPDDR4 IO, 0.5V for LPDDR5 IO



Deliverables

- Model and soft macro netlist
- Timing DK
- DFT model and netlist
- CIR, GDS (GDS2) and LEF
- Datasheet