

DDR4 RCD buffer:

Function/performance parameter

Parameter	Recommend device	Comments
Input frequency	Support DDR4-2400	
Output frequency	Support DDR4-2400	
Number of input channel	1	
Minimum delay	$(1.0+1/2T_{CK})$ ns	Tphl/Tplh
Maximum delay	$(1.3+1/2T_{CK})$ ns	
Input type	CMOS	
Output type	CMOS	
Supply voltage	1.14V-1.26V	
Output current	50mA	
Output impedance	10-120 Ω	Very Strong Drive Impedance=10ohmn Weak Drive Impedance for Light Drive Impedance=120ohm
Output rising time	$t > 0.045$ ns	Calculated by max slew rate=8V/ns
Output falling edge time	$t > 0.045$ ns	Calculated by max slew rate=8V/ns
Drive ratio	1:2	Number of input: number of output
Jitter	$\leq 0.025 * T_{ck}$	Provide RMS value, P-P value, phase noise curve
Maximum phase difference between outputs	$-0.125 * T_{ck} < t < 0.125 * T_{ck}$	
Support crystal mode	No	
Supported crystal frequency band and corresponding load capacitance	No	
Package	FBGA325	
Other	32bit 1:2DDR4 driver with parity check function; Follow DDR4RCD01 JEDEC	

Quality and reliability parameters

Parameter	Recommend device	Comments
ESD (KV)	ESD-HBM ≥ 2000 V ESD-CDM ≥ 500 V	

Support hot plugging	No	
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Environmental adaptability requirements

Parameter	Recommend device	Comments
Working temperature	-40° C—120° C	Junction temperature
Storage temperature	-65° C—150° C	

Environmental protection requirements

Parameter	Recommend device	Comments
RoHS	Yes	
Pb free	Yes	