

Transaction Types

TLP Name	Abbrev.	Supported in PCI	Routing Type	Format	Type	Notes
Memory Read Request	Mrd/MRd32	Y	ADDR	00	0 0000	
	Mrd64	Y	ADDR	01	0 0000	
Memory Read Request Locked	MrdLk/MRdLk32	Y	ADDR	00	0 0001	
	MrdLk64	Y	ADDR	01	0 0001	
Memory Write Request	Mwr/MW32	Y	ADDR	10	0 0000	
	Mwr64	Y	ADDR	11	0 0000	
I/O Read Request	IOrd	Y	ADDR	00	0 0010	
I/O Write Request	IOWr	Y	ADDR	10	0 0010	
Configuration Read Type 0	CfgRd0	Y	ID	00	0 0100	
Configuration Write Type 0	CfgWr0	Y	ID	10	0 0100	
Configuration Read Type 1	CfgRd1	Y	ID	00	0 0101	
Configuration Write Type 1	CfgWr1	Y	ID	10	0 0101	
Message Request	MsgD	N	ID, Implicit, ADDR	01	1 0r ₁ r ₁ r ₀	See Routing Codes
Message Request with Data Payload	MsgD	N	ID, Implicit, ADDR	11	1 0r ₁ r ₁ r ₀	See Routing Codes
Completion without Data	CplD	N	ID	00	0 1010	
Completion with Data	CplD	N	ID	10	0 1010	
Completion for Locked Memory Read w/o Data	CplLk	N	ID	00	0 1011	
Completion for Locked Memory Read	CplDLk	N	ID	10	0 1011	

Routing Codes for Message Requests	r ₁ r ₁ r ₀
Route to the root complex (implicit)	000
Route by the address	001
Route by the ID	010
Downstream broadcast from the Root	011
Local message targeting the adjacent node (implicit)	100
Gathered and routed to the root complex (implicit)	101
Terminate at the receiver (reserved)	110-111

Credits	Code
Posted request header	PH
Posted data header	PD
Non-posted request header	NPH
Non-posted request data payload	NPR
Completion headers	CPLH
Completion data payload	CPLD

Completion Status Codes	Code	Cause	Error Type
Successful Completion	000b (SC)	None	None
Unsupported Request	001b (UR)	Unsupported address	Uncorrectable error
Configuration Request Retry Status	010b (CRS)	Temporarily off-line, retry	
Completer Abort	100b (CA)	Completer off-line due to error	Uncorrectable error

*all other codes reserved