

Transactions	Fields	Bit Width
Read	ReadNoSnp	128 bits
	ReadOnce	
	ReadOnceCleanInvalid	
	ReadOnceMakeInvalid	
	ReadClean	
	ReadNotSharedDirty	
	ReadShared	
	ReadUnique	
Dataless	CleanUnique	128 bits
	MakeUnique	
	Evict	
	StashOnceUnique	
	StashOnceShared	
	CleanShared	
	CleanSharedPersist	
	CleanInvalid	
	MakeInvalid	
Write	WriteNoSnpPtl , WriteNoSnpFull	128 bits
	WriteUniquePtl , WriteUniqueFull	
	WriteUniquePtlStash , WriteUniqueFullStash	
	WriteBackPtl , WriteBackFull	
	WriteCleanFull	
	WriteEvictFull	
Atomic	AtomicStore	
	AtomicLoad	
	AtomicSwap	
	AtomicCompare	
CopyBack	WriteBackPtl , WriteBackFull	
	WriteCleanFull	
	WriteEvictFull	
Miscellaneous	DVMOp	
	PrefetchTgt	
	PCrdReturn	
Snoop	SnpOpenFwd	41-49 bit
	SnpOnce	

	SnpStashUnique	
	SnpStashShared	
	SnpCleanFwd	
	SnpClean	
	SnpNotSharedDirtyFwd	
	SnpNotSharedDirty	
	SnpSharedFwd	
	SnpShared	
	SnpUniqueFwd	
	SnpUnique	
	SnpUniqueStash	
	SnpCleanShared	
	SnpCleanInvalid	
	SnpMakeInvalid	
	SnpMakeInvalidStash	
	SnpDVMOp	
Identifiers	TgtID	7-11 bit
	SrcID	7-11 bit
	TxnID	8 bit
	DBID	8 bit
	ReturnTxnID	8 bit
	FwdTxnID	8 bit
	DataID	2 bit
	CCID	2 bit
	LPID	5 bit
	StashLPID	8 bit
	StashNID	7-11 bit
	ReturnNID	7-11 bit
	FwdNID	7-11 bit
	HomeNID	7-11 bit

<b>Channel</b>	<b>RN Channel</b>	<b>SN Channel</b>	
REQ	TZREQ	RXREQ	
RSP	RXRSP, TXRSP	TXRSP	
SNP	RXRSP		
DAT	TXDAT, RXDAT	RXDAT, TXDAT	
<b>Request Nodes</b>			
RN-F			
RN-D			
RN-D			
<b>Slave Nodes</b>			
SN-F			
SN-I			
<b>Channel Interface Signals</b>			
<b>REQ channel</b>	<b>RSP channel</b>	<b>SNP channel</b>	<b>DAT channel</b>
REQFLITPEND	RSPFLITPEND	SNPFLITPEND	DATFLITPEND
REQFLITV	RSPFLITV	NSPFLITV	DATFLITV
REQFLIT	RSPFLIT	SNPFLIT	DATAFLIT
REQLCRDV	RSPLCRDV	SNPLCRDV	DATLCRDV

<b>Flit Packet Definitions</b>		
<b>Request Flit</b>		
<b>Field</b>	<b>Field Width</b>	
QoS	4	
TgtID	7 to 11	
SrcID	7 to 11	
TxnID	8	
ReturnNID, StashNID	7 to 11	
StashNIDValid, Endian	1	
ReturnTXNID	8	
StashLPIDValid	8	
StashLPID	8	
Opcode	6	
Size	3	
Addr	44 to 52	
NS	1	
LikelyShared	1	
AllowRetry	1	
Order	2	
PCrdType	4	
MemAttr	4	
SnpAttr	1	
LPID	5	
Excl, SnoopMe	1	
ExpCompAck	1	
TraceTag	1	
RSVDC	0,4,12,16,24,32	
<b>Response Flit</b>		
<b>Field</b>	<b>Fild Width</b>	
QoS	4	
TgtID	7 to 11	
SrcID	7 to 11	
TxnID	8	
Opcode	4	
RespErr	2	
Resp	3	
FwdState, DataPull	3	
DBID	8	
PCrdType	4	
TraceTag	1	

<b>Snoop Flit</b>		
<b>Field</b>	<b>FieldWidth</b>	
QoS	4	
SrcID	7 to 11	
TxnID	8	
FwdID	7 to 11	
FwdTxnID	8	
StashLPIDValid, StashLPID	8	
VMIDExt	8	
Opcode	5	
Addr	41 to 49	
NS	1	
DoNotGoToSD	1	
DoNotDataPull	1	
RetToSrc	1	
TraceTag	1	
<b>Data Flit</b>		
<b>Field</b>	<b>FieldWidth</b>	
QoS	4	
TgtID	7 to 11	
SrcID	7 to 11	
TxnID	8	
HomeNID	7 to 11	
Opcode	4	
RespErr	2	
Resp	3	
FwdState	3	
DataPull, DataSource	3	
DBID	8	
CCID	2	
DataID	2	
TraceTag	1	
RSVDC	0,4,12,16,24,32	
BE	16,32,64	
Data	128,256,512	
DataCheck	0,16,32,64	
Poison	0,2,4,8	
<b>Protocol Flit Fields</b>		
<b>Field</b>		<b>Field Width</b>
TgtID		

SrcID		
HomeNID		
ReturnNID		
FwdNID		
LPID		
StashNID		
StashNIDValid		
StashLPID		
StashLPIDValid		
TxnID		
ReturnTxNID		
FwdTxnNID		
DBID		
Opcode	REQ	6
	RSP	4
	SNP	5
	DAT	4
Addr	PA	44 to 52
	VA	49 to 53
NS		
Size		3
MemAttr		4
SnpAttr		
LikelyShared		
Order		2
Excl		
Endian		
AllowRetry		
ExpCompAck		
SnoopMe		
RetToSrc		
DataPull		3
DoNotGoToSD		
DoNotDataPull		
QoS		
PCrdType		
TraceTag		
VMIDExt		
Resp	Snoop	3
	Comp	3
	WriteData	3
FwdState		3
RespErr		2

Data		128,256,512
CCID		2
DataID		128,256,512
BE		
DataCheck		
Poison		
DataSource		
RSVDC		4,8,12,16,24,32