T2 Tile Packet Header Formats

VERSION 11

Packet header

DATE 2020-02-07

Packet length is 1..255 bytes. Transport layer must handle byte and packet framing.

7 6 5 4 3 2 1 0 7 6 5 4 3 2 1 0 7 6 5 4 3 2 1 0 7 6 5 4 3 2 1 0 7 6 5 4 3 2 1 0 7 6 5 4 3		BYTE 4					BYTE 3							BYTE 2								BYTE 0 BYTE 1												
	2 1 0	3 2	5 4	6 5	7	0	1	2	3	4	5	6	7	L	2	3	4	5	6	7	L 0	2 2	3	4	5	6	7	1 (2	3	4	5	6	7
⊋																																		ュ

EN2 EN1 EN2 0 0

? →

T2 packet ST →

Non-standard 0 ASCII7 ?-

Standard 1 O

reserved

* 0 0 0 1 1 0 0 ASCII7:PRU control ASCII7:Code 0 ASCII7:DIR * 0 0 0 1 1 0 'P' 0 '0'..'1' 0 '0'..'2' Packet sync '0'..'2' * 0 0 0 1 'F' 0 '0'..'1' 0 Frame error * 0 0 0 1 1 0 0 '0'..'1' 0 '0'..'2' Timeout 'M' 1 1 * 0 0 0 1 1 0 0 '0'..'1' 0 '3' Monitor 0 0 0 1 1 0 ..all other values.. 0 '0'..'1' 0 '0'..'3'

Standard	1	LOCL	¬														
Routed standard	1	0	URG	OVR	ERR	SD2	SD1	SD0	?→								
Bulk	1	0	0	OVR	ERR	SD2	SD1	SD0	?→								
Urgent	1	0	1	OVR	ERR	SD2	SD1	SD0	MFM	¬							
Flash	1	0	1	OVR	ERR	SD2	SD1	SDO	0		Α	SC	117:0	Coc	le		?→
MFM	1	0	1	OVR	ERR	SD2	SD1	SDO	1	ITC	⋾						
ITC	1	0	1	OVR	ERR	SD2	SD1	SD0	1	1	RSVO	LVL2	LVL1	TNT0	STG1	STG0	?→
Event	1	0	1	OVR	ERR	SD2	SD1	SDO	1	0	?→						•

Abbreviations: Code: Meaning

? Optional data not defined by this spec

* Reserved, should ignore on read, should be 0 on write

→ For rest of packet→ Defined below

ENX Enable status bit, prudir x
ERR Error, corrupted packet
ITC Intertile Connection

LOCL Local packet moving PRU ↔ ARM, but not PRU ↔ PRU

LVLx Level number, bit x
MFM Movable Feast Machine
OVR Overrun, packet too long

RSV Reserved

SDx Packet source direction on read, destination direction on write, bit x

STGx Stage number, bit x

STND Standard packet format, defined by this spec

TYPx Type code, bit x

URG Urgent x 0 or 1