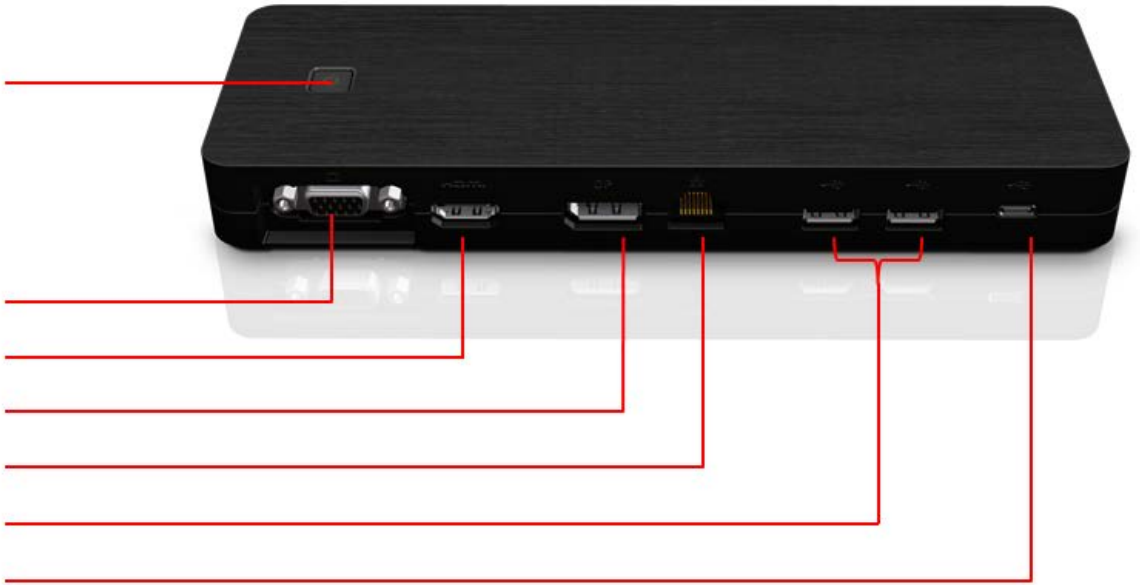
USB Type-C Portreplicator Interfaces

FUJITSU

Resume/ Wake up button



VGA

HDMI

Display Port 4K

Gigabit-LAN

USB3.1 Type A 4.5W

USB3.1 Type C 15W

USB Type-C Portreplicator Interfaces

AC adapter 19V / 90W

USB3.1 Type-C
- Upstream data / video signal to client
- Power Fujitsu client with up to 60W

USB3.1 Type A 4.5W

Combo Audio jack for Headphone

Additional Information

- Supported Fujitsu devices:
- U727, U747, U757, P727, U937, T937

- PXE boot possible, MAC address of USB Type-C Portreplicator is used

- MAC overwriting of USB Type-C Portreplicator only on running WINDOWS system

- Available type-C cable length = 1m

- USB3.1 is based on Gen1 with 5Gbit/s

Basic Display Output Matrix

P727 / U7x7 display output matrix

External Display	Internal Display		USB Type-C Port Replicator			Limitations
			HDMI 4096 x 2160 @24Hz 3840 x 2160@30Hz	Display Port 4096 x 2160 @24Hz 3840 x 2160@30Hz	VGA Output 1920×1200 60Hz	
One	ON		ON			
	ON			ON		
	ON				ON	
Two	ON		ON	ON		1920x1080p60Hz
	ON		ON		ON	1920x1080p60Hz
	ON			ON	ON	1920x1080p60Hz
Three	off		ON	ON	ON	1600x900 60Hz or 1280x1024 60Hz

- With activated internal display, maximum two external display interfaces can be used. For this use cases see limitation resolution
- VGA is supported either on system (if available) or on USB Type-C Portreplicator

Comparison

	FUJITSU USB Type-C Portreplicator	FUJITSU Portreplicator PR09	Thunderbolt (in general) no FTS products	FUJITSU Mechanical Portreplicator	Comment
Performance	►Up to 5Gbs via USB3.1 Gen1	►Up to 10Gbs via USB3.1 Gen2	►Up to 40Gbit/s total	►Systemperformance of device available	TBT: only when using 0,5m cable, 1m cable are passive and then 20Gbit/s Bandwidth shared with other protocols
Pixel	►1x 4k display @24Hz, ►up to 3 display in parallel depending on system performance and resolution	►up to 2x 4k displayport (HBR2)@60Hz	►Up to 2x 4k@60Hz (HBR2) 1x 5k	►up to2x 4k/60Hz ►up to 3 display in parallel depending on system and resolution	
Power Delivery to PC systems	►Up to 60W	►Up to 60W	►Up to 100W	►Optimized for each system	all based on USB-PD2.0 and depending on implementation. 100W also possible on USB-Type C
Protocols	►USB, DP1.2, Ethernet via USB	►USB3.1, DP1.2, Ethernet via USB	►USB3.1; PCI-E; Displayport; 10Gbit-Ethernet between computers	►System protocols	TBT: shared with other TBT protocols
Pricing	►Mid range	►High pricing	►High pricing	►Entry pricing	High pricing, even with passiv cable
Pros	►Fitting perfect for FJ mobile clients, ►resume from different power states (powermanagement features) ►2 external Displays running in FHD mode / 60Hz	►Best compatibility to USB clients, ►backward compatible via adapters ►Good MAC spoofing implementation	►Brilliant performance for dockings etc. but also needs to be shared with other protocolls like DP, PCI-E etc. ►Depending on implementation there is also USB host ontroller in TBT	►best price, best usability ►lock of system and portreplicator together ►no issues with additional drivers, ►no PXE boot limitations ►Powermanagement features	USB-C offers via alt mode more possible protocoll options (MHL3; TBT, DP, HDMI) but those needs to be implemented in system Thus, could be more confusing
	►WIN 10	►Deep integration in WIN10		Independent of OS	
Cons	►not released for multivendor usage ►Limited MAC spoofing	►USB compression ►slightly lower video quality ►driver still needed	►Expensive, ►if no USB-Host implemented, no USB C devices connectable	►Bulky and space consuming products ►related to limited number of devices only ►No multivendor approach	