Thunderbolt Docking_DK12DT		
Item	**Sub-Item**	**Description**
1.1 ID Requirement	Placement of Type	Horizontal placement
	Material	Metal
	Surface Finish	According the ID plan
	Color	According the ID plan
	Weight	Weight >400g
	Dimension	Length 220mm ; Width 84mm ; height 35mm
	Logo Printing	According the ID plan
1.2 Mechanical design	Thernal Solution	Fanless design
	K-lock	The unit will support both of Standard K-lock and Naro K-lock on the side panel
	Mounting hole	The units will support two M3/4mm screw hole on the bottom side. They are used for locking dock with mounting bracket. The pitch of mounting hole is 45mm
	Power Button	The unit can be optional to support power button or remove power button. The dock is defaul "power on" when user plug-in the external DC power to dock.
	Environment	Operation Temp : 0°C to 50°C Storage Temp : -20°C to 71°C

	Skin Temperature	When system is operating in full loading at 35°C environment temperature, the skin temperature of housing must follow below standard
		   Metal housing <50°C
		   Plastic housing <55°C

	Rubber Foot	The dock will support 4 rubber foot in horizontal placement.
1.3 I/O port placement		
1.4 Concept ID		TBD
1.5 Supported Platform	OS	Widowns 7, 8, 8.1 and 10 OS X / macOS 10.8 onward Google Chrome OS Google Android Ubuntu Linux
1.6 I/O port	Upstream port	1x thunderbolt port in front w/ Max. 96Watt PD 3.0 charging Support PD 5V/9V/15V/20V Profile
	Downstream USB ports	1x thunderbolt port in rear support 5V/3A power 1x USB-A 3.2 Gen2 port in front, support 5V/1.5A BC1.2 charging power 2x USB-A 3.2 Gen2 ports in rear 2x USB-A 2.0 ports in rear
	Audio Port	1x 3.5mm TRRS SPK/MIC jack in front with CTIA and OMTP auto detect
	LAN Port	1x RJ45 10/100/1000/2500Mbps ethernet connector in rear w/ LED
	SD Card slot	1x SD4.0 card reader slot in front, non push-push type
	DC Jack	1x DC Jack for 20V external DC power input
1.7 Video Ports		1x DP connector Support DP1.4++ interface 1x HDMI 2.1 connector Max. single 8K@30Hz or dual 4K@60Hz display output
1.8 AC Adapter	Type	Universal AC adaptor
	Wattage	135W
	Input Voltage	100V ~ 240V
	Output Voltage	20V
	number of Pin	2
	D/C jack Dimension	Inside Contact Diameter: 2.5mm Outside Contact Diameter: 5.5mm
	Special spec requirment	Global safety certification
	Others	N/A
	Type	Thunderbolt USB Type C to Type C cable
	Standard	Thunderbolt (20Gbps)
	Length	0.7 meter
	Current rating	Maximum 20V/5A

1.9 Cable	Emark	Yes
	Certification	UL, USB-IF compliance
	Color	Black
	Reliability	1. Cable Bending : +/-90°, 454g force loading, 10 cycles/min, 300mm between loading point to test point, 7000 cycles. 2. Cable Twist : Fix one end, twist cable in direction: +180°, 0°, -180°, 1000 cycles 3. Cable pull out force : Load 2.5kg, direction : +45°, 0°C, -45°C, duration : 60sec. per direction, 300mm between test point to loading 4. Cable SR bending : Weight 200g, Angle +/-90°, speed 40 cycles/minute, Length 300mm,
1.10 Regulation	EMC	Europe : CE US/Canada : FCC/ICES Other area: by request
	EMI Criteria	under 0db
	Safety	Optional
	Intrinsic safety	N/A
	Ruggedness	N/A
1.11 Green Product	ROHS / REACH	RoHS2.0 /REACH
	Others	1. EU : ErP directive lots 6, Power consumption threshold under off/standby mode will be smaller than 0.3W 2. California PROP 65 (Can be optional cost) 3. Halogen Free (Can be optional cost)
1.12 Reliability Test	ESD Protection	Contact : +/-4KV Air : +/-8KV Criteria A
	Connector insertion/extration	USB-A : 5000 cycles insertion/extration, 200 cycles/hour USB-C : 10000 cycles insertion/extration, 200 cycles/hour HDMI type A : 10000 cycles insertion/extration, 100+/-50 cycles/hour DP : 5000 cycles insertion/extration, 100+/-50 cycles/hour RJ45 : 750 cycles, 10 to 20 cycles/min Other connectors : 5000 cycles insertion/extration
	USB-C connector	USB-C connector should use the component qualified by USB-IF, and TID is mandatory for connector selecting
	Power button	Operating Cycles : 10000 cycles, Force 200 +/-50gf Testing speed : 20 cycles / min
	Flammability	UL94V0

1.13 Compatibility Test	Full function compatibility test	Full Function test with Window 10 / Mac OS
		  Test Platform :
		    TBD
		  Test Monitor :
		    4 different brand and resolution monitors
		  Other I/O devices
		    No limited for the brand or device type for the other I/O.

1.14 Product information	PID	
	VID	TBD
1.15 Package & Labels	Content	Dock x1 AC/DC power adapter x1 USB-C to C/A cable Power cord x1 (depend on different country area) QSG x1 (quick start guide) Warranty card x1
	Product Label	According the ID plan
	Packing material	The OTS product will be packed by brown box
	Box label	It will be white color paper and black text to show product information following Getac standard
	Carton label	Follow Getac standard