KL-Certification GmbH
German Certification Body

Type-Based Certificate

Certificate Number 認証番号	219 - 247207
Certificate Holder 認証を受けた者	Tersus GNSS Inc.
Certificate Holder Address 認証を受けた者の住所	Unit E2-501 and E2-601, Artificial Intelligence Industrial Park, No.88Jinjihu Avenue, Suzhou Industrial Park, Suzhou Area, China (jiangsu)Pilot Free Trade Zone
Product Model Name 製品型式又は名称	TC100
Product Description 製品説明	Control Tablet
Manufacturer (if different from Certificate Holder) 製造者 （認証を受けた者と異なる場合）	

Type-Based Certificate 工事設計認証書	KL-Certification GmbH, operating as a Registered Foreign Certification Body (CAB ID: 219) with respect to Japan, declares that the listed product complies with the Technical Regulations Conformity Certification of Specified Radio equipment in accordance with the provisions of Article 38-24, Paragraph 1 of the Radio Law. KL-Certification GmbH は、日本における登録外国適合性評価機関 (CAB ID: 219) として活動しており、記載されている製品が電波法第 38 条の 24 第 1 項の規定に従って特定無線設備の技術基準適合証明に適合していることを宣言します。
Classification of Specified Radio equipment 特定無線設備の区分	Ordinance concerning Technical Regulations Conformity Certification etc. of Specified Radio Equipment 特定無線設備の技術基準適合証明等に関する規則
Annex 付属書類	The certificate is only valid together with the annex. 証明書は付属書類と併せてのみ有効となります。

CAB 219

Shanghai, 09.09.2024	Wailand Zhang
Place, issue date 場所、発行日	Name & authorized Signature 名前と正式な署名

KL-Certification GmbH
Heinrich-Hertz-Allee 7,
66386 St Ingbert, Germany
https://www.kl-certification.de

Authorized by the Ministry of Internal Affairs and Communications (MIC)

Product Characteristics

Brand Name	N/A
Hardware Version	CP021-MAIN-BOARD-V1.2
Software Version	NAV_A_V1.10_LCD7-10_W1B0_LPDDR_FO_20240411_SP2

Specified Categories

Specified Radio Equipment	MIC Ordinance No. 37	remark
Low power data communications system in the 2.4GHz band	Article 2 paragraph 1 item 19	
LTE cellular phone	Article 2 paragraph 1 item 11-19	
Digital cordless telephone (TDMA/OFDMA)	Article 2 paragraph 1 item 21-3	
Next-generation PHS land mobile station	Article 2 paragraph 1 item 54	
WCDMA cellular phone (except land mobile station which relays portable radio communication)	Article 2 paragraph 1 item 11-3	
DS-CDMA(HSDPA) cellular phone (except land mobile station which relays portable radio communication)	Article 2 paragraph 1 item 11-7	

Emission Information

Technology	Frequency Range	Emission Designator	RF Power		Antenna Power
			Max.	Type	
Bluetooth BLE	2402MHz-2480MHz	1M30F1D	5.30mW	Conducted	--
Bluetooth BR	2402MHz-2480MHz	78M1G1D	--	--	0.045mW/MHz
Bluetooth EDR	2402MHz-2480MHz	78M3F1D	--	--	0.045mW/MHz
802.11b	2412MHz-2472MHz	14M0G1D	--	--	4.20mW/MHz
802.11g	2412MHz-2472MHz	16M4D1D	--	--	5.10mW/MHz
802.11n20	2412MHz-2472MHz	17M5D1D	--	--	4.80mW/MHz
UMTS Band1	1922.6MHz-1977.4MHz	5M00 G1A,G1B,G1C, G1D,G1E,G1F, G1X,G7W	200mW	Conducted	
UMTS Band8	902.6MHz-912.4MHz	5M00 G1A,G1B,G1C, G1D,G1E,G1F, G1X,G7W	200mW	Conducted	
HSPA Band1	1922.6MHz-1977.4MHz	5M00 G1A,G1B,G1C, G1D,G1E,G1F, G1X,G7W	200mW	Conducted	
HSPA Band8	902.6MHz-912.4MHz	5M00 G1A,G1B,G1C, G1D,G1E,G1F, G1X,G7W	200mW	Conducted	
E-UTRA Band 1	1927.2MHz-1977.5MHz	5M00 D1A,D1B,D1C, D1D,D1E,D1F,	200mW	Conducted	--

		D1X,D7W,G1A ,G1B,G1C,G1D ,G1E,G1F,G1X, G7W 5M00			
E-UTRA Band 3	1712.5MHz-1782.5MHz	D1A,D1B,D1C, D1D,D1E,D1F, D1X,D7W,G1A ,G1B,G1C,G1D ,G1E,G1F,G1X, G7W 5M00	200mW	Conducted	--
E-UTRA Band 8	902.5MHz-912.5MHz	D1A,D1B,D1C, D1D,D1E,D1F, D1X,D7W,G1A ,G1B,G1C,G1D ,G1E,G1F,G1X, G7W 5M00	200mW	Conducted	--
E-UTRA Band 18	817.5MHz-827.5MHz	D1A,D1B,D1C, D1D,D1E,D1F, D1X,D7W,G1A ,G1B,G1C,G1D ,G1E,G1F,G1X, G7W 5M00	200mW	Conducted	--
E-UTRA Band 19	832.5MHz-842.5MHz	D1A,D1B,D1C, D1D,D1E,D1F, D1X,D7W,G1A ,G1B,G1C,G1D ,G1E,G1F,G1X, G7W 5M00	200mW	Conducted	--
E-UTRA Band 26	817.5MHz-842.5MHz	D1A,D1B,D1C, D1D,D1E,D1F, D1X,D7W,G1A ,G1B,G1C,G1D ,G1E,G1F,G1X, G7W 5M00	200mW	Conducted	--
E-UTRA Band 28	720.5MHzto 745.5MHz	D1A,D1B,D1C, D1D,D1E,D1F, D1X,D7W,G1A ,G1B,G1C,G1D ,G1E,G1F,G1X, G7W 10M0	200mW	Conducted	--
E-UTRA Band 1	1934.7MHz-1975MHz	D1A,D1B,D1C, D1D,D1E,D1F, D1X,D7W,G1A ,G1B,G1C,G1D ,G1E,G1F,G1X, G7W 10M0	200mW	Conducted	--
E-UTRA Band 3	1715MHz-1780MHz	D1A,D1B,D1C, D1D,D1E,D1F, D1X,D7W,G1A ,G1B,G1C,G1D	200mW	Conducted	--

		,G1E,G1F,G1X, G7W 10M0			
E-UTRA Band 8	905MHz-910MHz	D1A,D1B,D1C, D1D,D1E,D1F, D1X,D7W,G1A ,G1B,G1C,G1D ,G1E,G1F,G1X, G7W 10M0	200mW	Conducted	--
E-UTRA Band 18	820MHz-825MHz	D1A,D1B,D1C, D1D,D1E,D1F, D1X,D7W,G1A ,G1B,G1C,G1D ,G1E,G1F,G1X, G7W 10M0	200mW	Conducted	--
E-UTRA Band 19	835MHz-840MHz	D1A,D1B,D1C, D1D,D1E,D1F, D1X,D7W,G1A ,G1B,G1C,G1D ,G1E,G1F,G1X, G7W 10M0	200mW	Conducted	--
E-UTRA Band 26	820MHz-840MHz	D1A,D1B,D1C, D1D,D1E,D1F, D1X,D7W,G1A ,G1B,G1C,G1D ,G1E,G1F,G1X, G7W 10M0	200mW	Conducted	--
E-UTRA Band 28	723MHzto 743MHz	D1A,D1B,D1C, D1D,D1E,D1F, D1X,D7W,G1A ,G1B,G1C,G1D ,G1E,G1F,G1X, G7W 15M0	200mW	Conducted	--
E-UTRA Band 1	1942.2MHz-1972.5MHz	D1A,D1B,D1C, D1D,D1E,D1F, D1X,D7W,G1A ,G1B,G1C,G1D ,G1E,G1F,G1X, G7W 15M0	200mW	Conducted	--
E-UTRA Band 3	1717.5MHz-1777.5MHz	D1A,D1B,D1C, D1D,D1E,D1F, D1X,D7W,G1A ,G1B,G1C,G1D ,G1E,G1F,G1X, G7W 15M0	200mW	Conducted	--
E-UTRA Band 18	822.5MHz-822.5MHz	D1A,D1B,D1C, D1D,D1E,D1F, D1X,D7W,G1A ,G1B,G1C,G1D ,G1E,G1F,G1X, G7W	200mW	Conducted	--

E-UTRA Band 19	837.5MHz-837.5MHz	15M0 D1A,D1B,D1C, D1D,D1E,D1F, D1X,D7W,G1A ,G1B,G1C,G1D ,G1E,G1F,G1X, G7W	200mW	Conducted	--
E-UTRA Band 26	822.5MHz-837.5MHz	15M0 D1A,D1B,D1C, D1D,D1E,D1F, D1X,D7W,G1A ,G1B,G1C,G1D ,G1E,G1F,G1X, G7W	200mW	Conducted	--
E-UTRA Band 28	725.5MHzto 740.5MHz	15M0 D1A,D1B,D1C, D1D,D1E,D1F, D1X,D7W,G1A ,G1B,G1C,G1D ,G1E,G1F,G1X, G7W	200mW	Conducted	--
E-UTRA Band 1	1949.7MHz-1970MHz	20M0 D1A,D1B,D1C, D1D,D1E,D1F, D1X,D7W,G1A ,G1B,G1C,G1D ,G1E,G1F,G1X, G7W	200mW	Conducted	--
E-UTRA Band 3	1720MHz-1775MHz	20M0 D1A,D1B,D1C, D1D,D1E,D1F, D1X,D7W,G1A ,G1B,G1C,G1D ,G1E,G1F,G1X, G7W	200mW	Conducted	--
E-UTRA Band 28	728MHzto 738MHz	20M0 D1A,D1B,D1C, D1D,D1E,D1F, D1X,D7W,G1A ,G1B,G1C,G1D ,G1E,G1F,G1X, G7W	200mW	Conducted	--
E-UTRA Band 39	1899.1MHz	5M00 X7D,X7W	100mW	Conducted	--
E-UTRA Band 41	2547.5MHz-2647.5MHz	5M00 X1A,X1B,X1C, X1D,X1F,X1X,X 7D,X7W	200mW	Conducted	--
E-UTRA Band 41	2550MHz-2645MHz	10M0 X1A,X1B,X1C, X1D,X1F,X1X,X 7D,X7W	200mW	Conducted	--
E-UTRA Band 41	2555MHz-2640MHz	20M0 X1A,X1B,X1C, X1D,X1F,X1X,X 7D,X7W	200mW	Conducted	--

Antenna

Antenna Type	Manufacturer	Model/Part No.	Max Gain [dBi]	Frequency band [MHz]
FPC Antenna	Shenzhen HE DIAN XUN Technology Co.,Ltd	SPRING2 -FPC	3.84dBi	2400-2900MHz
FPC Antenna	Pulse Electronics	SPRING2 - MAIN-FPC	1.32dBi	1920-1980MHz
			1.77dBi	1700-1800MHz
			-0.91dBi	900-920MHz
			1.77dBi	810-830MHz
			1.35dBi	830-840MHz
			1.77dBi	810-850MHz
			-0.25dBi	720-750MHz
			0.96dBi	1880-1920MHz
			1.86dBi	2540-2660MHz

The assessed Technical Construction File is part of the application. The validity of the Certificate is limited to products equal to the examined one.
When placing the product on the market in Japan the manufacturer or certificate holder must label the product with the following Specified Radio Equipment marking:

R 219 - 247207

Technical Construction File assessed for this type-examination:

Test Report(s):	Supporting Documentation:
Report No.: SHATBL2405004W01 issued by ShangHai ATBL Technology Co., Ltd., dated 07/06/2024	Service Agreement Agent Authorization Application Form
Report No.: SHATBL2405004W02 issued by ShangHai ATBL Technology Co., Ltd., dated 09/05/2024	Proof for Product Quality Control Declaration for Radio Protection Methodology
Report No.: SHATBL2405004W03 issued by ShangHai ATBL Technology Co., Ltd., dated 06/26/2024	Antenna Specifications Bill of Material Block Diagram
Report No.: SHATBL2405004W04 issued by ShangHai ATBL Technology Co., Ltd., dated 06/26/2024	Schematics PCB Layout/Parts Placement Operational Description
Report No.: SHATBL2405004W05 issued by ShangHai ATBL Technology Co., Ltd., dated 06/26/2024	Internal Photos External Photos Label and label location Test Setup Photos User Manual

Please note the following points:

1) The review has been completed and a certificate has been issued, the certificate is valid with immediate effect.
2) The documents shall be submitted to MIC and the device shall be published after a while on the MIC website: http://www.tele.soumu.go.jp/giteki/SearchServlet?pageID=js01

Radio Law, Article 38-25

1) A person who has received a construction design certification (hereinafter referred to as a "certified dealer") from a registered certification body, when dealing with a specified radio equipment based on the construction design pertaining to the relevant construction type certification (hereinafter referred to as "certified construction design") must ensure that the relevant specified radio equipment conforms to the relevant certified construction design.
2) A certified dealer must inspect the specified radio equipment that it deals in under the preceding paragraph, in accordance with the method for verification pertaining to the construction design certification, and prepare and maintain the inspection records specified by Order of the Ministry of Internal Affairs and Communications.