TEST REPORT
COMMISSION REGULATION (EU) 2019/2021 –
ecodesign requirements for electronic displays pursuant

Job Number.......................................:	XK2510007010S
Tested by (name + signature)......:	Rachel Yang
Reviewed by (name + signature) :	Jean Shu
Approved by (name + signature).:	Andy Wang
Date of issue.....................................:	Sep. 28, 2025
Total number of pages.....................:	15 pages
Testing Laboratory............................ :	**Shenzhen SiCT Technology Co., Ltd.**
Address...:	202, Building 3, No.111 Huanguan Middle Road, Songyuanxia Community, Guanhu Street, Longhua District, Shenzhen, Guangdong, China
Applicant's name.............................:	DOKE COMMUNICATION(HK)LIMITED
Address...:	19H MAXGRAND PLAZA NO 3 TAI YAU STREET SAN PO KONG KL
Manufacturer's name........................	Shenzhen DOKE Electronic Co.,Ltd
Address...:	801,Building3,7th Industrial Zone, Yulv Community, Yutang Road, Guangming District, Shenzhen, China.
Test specification:	
Standard..:	This test program is based on the following standards:
	EN 50564: 2011;
	EN 62087-1:2016
	EN IEC 62087-2:2023
	EN IEC 62087-3:2023
	EN IEC 62087-7: 2019
	(EU) 2019/2021
	(EU) 2021/341
	(EU) 2019/2013
	(EU) 2021/340
Test procedure...................................:	Energy Efficiency test report
Non-standard test method..............	N/A
Test Report Form No.....................:	**EN50564-2019/2021/EU-a**
Test Report Form(s) Originator...:	Shenzhen SiCT Technology Co., Ltd.
Master TRF..:	Dated 2020-10
Test item description........................:	Portable LCD Display
Trade Mark...:	Blackview
Model/Type reference.....................:	DCM6,DCM 6
Ratings...:	Input: 5.0-20V⎓5.0AMAX

Tests Conducted:

As requested by the applicant, for details refer to test standards in page 3.

Conclusion:

The energy efficiency index (EEI) is 0.28 based on the power consumption in on mode is 4.5W declared by customer, in off mode is 0.25W.

These results are in compliance with the all stage requirements of the EC regulation (EU) 2019/2021.

General product information:

The products covered in this report is Portable LCD Display, it can be supplied by USB wire

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Standard and environmental condition

Test laboratory	Shenzhen SiCT Technology Co., Ltd.
Address	202, Building 3, No.111 Huanguan Middle Road, Songyuanxia Community, Guanhu Street, Longhua District, Shenzhen, Guangdong, China
Standard applied	EN 50564: 2011 + EN 62087-1:2016+ EN IEC 62087-2:2023+ EN IEC 62087-3:2023 + EN IEC 62087-7:2019 + (EU) 2019/2021 + (EU) 2021/341+(EU) 2019/2013.
Tested at	230VAC / 50 Hz
Ambient temp.	25.3°C
%VTHD of electricity supply	0.1%
Measuring device	Yokogawa WT210 Power Meter
Input signal	SDR Dynamic Video Power Test signal dynamic broadcast content and 1KHz sine-wave audio signal (Resolution: 1920× 1080) via HDMI
Set-up and circuits used for electrical testing	See Page 11 Testing circuit

Measurement conditions

Operating condition	Standby mode
Method used	NA
Comments	NA

Operating condition	Off mode
Method used	Sampling Method (Clause 5.3.2 of EN 50564: 2011+ 2019/2021/EU)
Comments	The product was measured in "Off-mode mode. The product was connected to the mains power source and without information or status display.

Operating condition	Networked standby mode
Method used	NA
Comments	NA

When determining the test conclusion, the Measurement Uncertainty of the test has been considered.

Possible test case verdicts:
- test case does not apply to the test object: N/A
- test object does meet the requirement : P (Pass)
- test object does not meet the requirement: F (Fail)
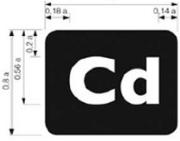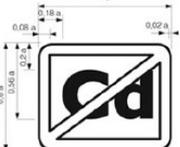
Test and verification results

Clause	Subject matter and scope	Remark	Verdict
3	The requirements in points A and B of Annex II shall not apply to the some displays	Not such displays	N/A
4	The requirements in points A, B and C of Annex II shall not apply to the some displays:	Not such displays	P

Clause	Ecodesign requirements	Remark	Verdict
A	ENERGY EFFICIENCY REQUIREMENTS		P
A.1	ENERGY EFFICIENCY INDEX LIMITS FOR ON-MODE		P
	$P_{measured}$ is the measured power in Watts in on mode in the normal configuration, in standard dynamic range (SDR)	$P_{measured}$ = 4.5W Declared power = 4.5W	--
	A represents the screen area in dm^2	$7.14 dm^2$	--
	corr is a correction factor of 10 for OLED electronic displays that do not apply the ABC allowance in point B (1). corr shall be zero in all other cases.	Corr: 0	--
	The energy efficiency index (EEI) of an electronic display shall be calculated using the following equation: $$EEI = \frac{(P_{measured} + 1)}{(3 \times [90 \times tanh(0,02 + 0,004 \times (A - 11)) + 4] + 3) + 3}$$	The energy efficiency index (EEI): 0.28	--
	The EEI of an electronic display shall not exceed the maximum EEI (EEI max) according to the limits in Table 1 from the dates indicated.	The maximum EEI: 0.28 Limit: ≤0.3	P
B	ALLOWANCES AND ADJUSTMENTS FOR THE PURPOSE OF THE EEI CALCULATION AND FUNCTIONAL REQUIREMENTS		P
B.1	Electronic displays with automatic brightness control (ABC)		N/A
	Electronic displays qualify for a 10 % reduction in $P_{measured}$, if they meet all of the point (a) to (e) requirements:		N/A
B.2	Forced menu and set up menus		P
	Electronic displays may be placed on the market with a forced menu on initial activation proposing alternative settings. Where a forced menu is provided, the normal configuration shall be set as default choice, otherwise the normal configuration shall be the out-of-the-box setting.	No forced menu was provided.	N/A
	If the user selects a configuration other than the normal configuration and this configuration results in a higher power demand than the normal configuration, a warning message about the likely increase in energy use shall appear and confirmation of the action shall be explicitly requested.		N/A

The table image in the EEI limits row:

EEI limits for on-mode		
	EEI_{max} for electronic displays with resolution up to 2 138 400 pixels (HD)	EEI_{max} for electronic displays with resolution above 2 138 400 pixels (HD) and up to 8 294 400 pixels (UHD-4k)	EEI_{max} for electronic displays with resolution above 8 294 400 pixels (UHD-4k) and for MicroLED displays
1 March 2021	0,90	1,10	n.a.
1 March 2023	0,75	0,90	0,90

Clause	Ecodesign requirements	Remark	Verdict
	If the user selects a setting other than those that are part of the normal configuration and this setting results in a higher energy consumption than the normal configuration, a warning message about the likely increase in energy consumption shall appear and confirmation of the action explicitly requested.		P
	A change by the user in a single parameter in any setting shall not trigger any change in any other energy-relevant parameter, unless unavoidable. In such a case a warning message shall appear about the change of other parameters and the confirmation of the change shall be explicitly requested.		P
B.3	Peak white luminance ratio		P
	In the normal configuration, the peak white luminance of the electronic display in a 100 lux ambient light viewing environment shall not be less than 220 cd/m^2 or, if the electronic display is primarily intended for close viewing by a single user, not less than 150 cd/m^2		N/A
	If the electronic display's peak white luminance in the normal configuration is set to lower values, it shall not be less than 65 % of the peak white luminance of the display, in a 100 lux ambient light viewing environment in the brightest on mode configuration.	94.16%	P
C	OFF MODE, STANDBY AND NETWORKED STANDBY MODE REQUIREMENTS		P
C.1	Power demand limits other than on-mode		P
	Electronic displays shall not exceed power demand limits in the different modes and conditions listed in Table 2: **power demand limits other than on-mode, in Watts** 	Off mode	Standby mode	Networked standby mode	 Maximum limits: 0,30 / 0,50 / 2,00 Allowances for additional functions when present and enabled Status display: 0,0 / 0,20 / 0,20 Deactivation using room presence detection: 0,0 / 0,50 / 0,50 Touch functionality, if usable for activation: 0,0 / 1,00 / 1,00 HiNA function: 0,0 / 0,0 / 4,00 Total maximum power demand with all additional functions when present and enabled: 0,30 / 2,20 / 7,70	For off mode: 0.25W;	P
C.2	Availability of off, standby and networked standby modes		P
	Electronic displays shall provide off mode or standby mode or a networked standby mode or other modes which do not exceed the applicable power demand requirements for standby mode.		P
	The configuration menu, instruction manuals and other documentation, if any, shall refer to off mode, standby mode or networked standby mode using those terms.		P
	Automatic switch to off mode and/or standby mode and/or another mode which does not exceed the applicable power demand requirements for standby mode shall be set as default, including for networked displays where the network interface is enabled when in on mode.		P

Clause	Ecodesign requirements	Remark	Verdict
	Networked standby mode shall be disabled in 'normal configuration' of a networked television. The end user shall be prompted to confirm the activation of networked standby, if it is needed for a chosen remotely activated function, and must be able to disable it.	No networked standby mode provided	N/A
	Networked electronic displays shall comply with the requirements for standby mode when networked standby mode is disabled.		N/A
C.3	Automatic standby in televisions		N/A
(a)	Televisions shall provide a power management function, enabled as delivered by the manufacturer that, within 4 hours following the last user interaction, shall switch the television from on mode into standby mode or networked standby mode or another mode which does not exceed the applicable power demand requirements respectively for standby or networked standby mode. Before such automatic switch, televisions shall show, for at least 20 seconds, an alert message warning the user of the impending switch, with possibility of delaying or temporarily cancelling it.		N/A
(b)	If the television provides a function allowing the user to shorten, extend or disable the 4-hour period for automatic mode transitions detailed in (a), a warning message shall appear about a potential increase in energy use and a confirmation of the new setting must be requested when an extension beyond the 4-hour period or disabling is selected.		N/A
(c)	If the television is equipped with a room presence sensor, the automatic transition from on mode into any mode as detailed in (a) applies if no presence is detected for no more than 1hour.	No such functionality	N/A
(d)	Televisions with various selectable input sources shall prioritise the power management protocols of the signal source selected and displayed over those default power management mechanisms described in the paragraphs (a) to (c) above.	No such functionality	N/A
C.4	Automatic standby in displays other than televisions		P
	Electronic displays other than televisions, with various selectable input sources shall switch, as configured in the normal configuration, into standby mode, networked standby mode or another mode which does not exceed the applicable power demand requirements respectively for standby or networked standby mode when no input is detected by any input source for over 10 seconds and, for digital interactive whiteboards and for broadcast displays, for over 60 minutes.	A warning message displayed when no signal input over 20 seconds	P
	Before triggering such a switch, a warning message shall be displayed and the switch completed within 10 minutes.	The equipment into off mode within 10 minutes after a warning message displayed	P
D	MATERIAL EFFICIENCY REQUIREMENTS		P
D.1	Design for dismantling, recycling and recovery		P

Clause	Ecodesign requirements	Remark	Verdict
	Manufacturers, importers or their authorised representatives shall ensure that joining, fastening or sealing techniques do not prevent the removal, using commonly available tools, of the components indicated in point 1 of Annex VII of Directive 2012/19/EU on WEEE or in Article 11 of Directive 2006/66/EC of the European Parliament and of the Council (1) on batteries and accumulators and waste batteries and accumulators, when present.		P
	The derogations indicated in Article 11 of Directive 2006/66/EC about permanent connection between the electronic display and the battery or accumulator apply.		P
	Manufacturers, importers or their authorised representatives shall, without prejudice to point 1 of Article 15 of Directive 2012/19/EU, make available, on a free-access website, the dismantling information needed to access any of the products components referred to in point 1 of Annex VII of Directive 2012/19/EU.	No user manual was provided	P
	This dismantling information shall include the sequence of dismantling steps, tools or technologies needed to access the targeted components.		P
	The end of life information shall be available until at least 15 years after the placing on the market of the last unit of a product model.		P
D.2	Marking of plastic components		
(a)	Plastic components heavier than 50g: Shall be marked by specifying the type of polymer with the appropriate standard symbols or abbreviated terms set between the punctuation marks '>' and '<' as specified in available standards. The marking shall be legible.	Marked on enclosure	P
	Plastic components are exempt from marking requirements in the following circumstances (i) to (iii):		P
	For the following plastic components no marking is required (i) to (iv):		P
(b)	Components containing flame retardants shall additionally be marked with the abbreviated term of the polymer followed by hyphen, then the symbol 'FR' followed by the code number of the flame retardant in parentheses. The marking on the enclosure and stand components shall be clearly visible and readable.		P
D.3	Cadmium logo		P
	Electronic displays with a screen panel in which concentration values of Cadmium (Cd) by weight in homogeneous materials exceed 0,01 % as defined in Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment, shall be labelled with the 'Cadmium inside' logo. The logo shall be clearly visible durable, legible and indelible.	Not exceed 0.01 %	N/A

Clause	Ecodesign requirements	Remark	Verdict
	The logo shall be in the form of the following graphic: 		N/A
	The dimension of 'a' shall be greater than 9 mm and the typeface to be used is 'Gill Sans'.		N/A
	An additional 'Cadmium inside' logo shall be firmly attached internally on the display panel or molded in a position clearly visible to workers once the external back cover bearing the external logo is removed.		N/A
	A 'Cadmium free' logo shall be used if concentration values of Cadmium (Cd) by weight in any homogeneous material part of the display do not exceed 0,01 % as defined in Directive 2011/65/EU. 	Marked on marking label	P
	The dimension of 'a' shall be greater than 9 mm and the typeface to be used is 'Gill Sans'.		P
D.4	Halogenated flame retardants		P
	The use of halogenated flame retardants is not allowed in the enclosure and stand of electronic displays.	Not provided	P
E	INFORMATION AVAILABILITY REQUIREMENTS		P
	The product manufacturer, importer or authorised representative shall make available the information set out below when placing on the market the first unit of a model or of an equivalent model.		P
	The information shall be provided free of charge to third parties dealing with professional repair and reuse of electronic displays (including third party maintenance actors, brokers and spare parts providers).		P
E.1	Availability of software and firmware updates		P
	The latest available version of the firmware shall be made available for a minimum period of eight years after the placing on the market of the last unit of a certain product model, free of charge or at a fair, transparent and non- discriminatory cost. The latest available security update to the firmware shall be made available until at least eight years after the placing on the market of the last product of a certain product model, free of charge.		P
	Information on the minimum guaranteed availability of software and firmware updates, availability of spare parts and product support shall be indicated in the product information sheet as from Annex V of Regulation (EU) 2019/2013.		P

(EU) 2019/2013: energy labelling of electronic displays

Clause	Energy efficiency requirements	Remark	Verdict
A	The energy efficiency class of an electronic display shall be determined on the basis of its energy efficiency index for labelling (EEI label) as set out in Table 1. The EEI label of an electronic display shall be determined in accordance with part B of this Annex.		P
	Table 1 **Energy efficiency classes of electronic displays** 	Energy Efficiency Class	Energy Efficiency Index (EEI_{label})
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A	$EEI_{label} < 0.30$
B	$0.30 \leq EEI_{label} < 0.40$
C	$0.40 \leq EEI_{label} < 0.50$
D	$0.50 \leq EEI_{label} < 0.60$
E	$0.60 \leq EEI_{label} < 0.75$
F	$0.75 \leq EEI_{label} < 0.90$
G	$0.90 \leq EEI_{label}$		Class A	P
B	Energy Efficiency Index (EEI label)		P
	The Energy Efficiency Index (EEI label) of the electronic display shall be calculated using the following equation: $$EEI_{label} = \frac{(P_{measured} + 1)}{(3 \times [90 \times tanh(0,025 + 0,0035 \times (A - 11)) + 4] + 3) + corr_l}$$	$EEI_{label}= 0.28$	P
	where: A represents the viewing surface area in dm^2; P measured is the measured power in on mode in Watts in the normal configuration and set as indicated in Table 2; Corri is a correction factor set as indicated in Table 3.		--
	Table 2 **Measurement of $P_{measured}$** 	Dynamic Range level	$P_{measured}$
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Standard Dynamic Range (SDR): $Pmeasured_{SDR}$	Power demand in Watts (W) in on mode, measured when displaying standardised test sequences of moving picture from dynamic broadcast content. Where allowances are applicable according to part C of this Annex, they should be deducted from $P_{measured}$.
High Dynamic Range (HDR) $Pmeasured_{HDR}$	Power demand in Watts (W) in on mode, measured as for $Pmeasured_{SDR}$ but with the HDR functionality activated by metadata in the standardised HDR test sequences. Where allowances are applicable according to part C of this Annex, they should be deducted from $P_{measured}$.			--
	Table 3 **$corr_l$ value** 	Electronic Display type	$corr_l$ value
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Television	0,0
Monitor	0,0
Digital signage	0,00062*(lum-500)*A where 'lum' is the peak white luminance, in cd/m^2, of the brightest on mode configuration of the electronic display and A is the screen area in dm^2		$Corr_i$: 0	--
	The declared values of the on mode power ($P_{measured}$) and viewing surface area (A) as listed in Table 5 of Annex VI shall be used for the EEI calculation.		P
C	Allowances and adjustments for the purpose of the EEI label calculation		N/A

Clause	Energy efficiency requirements	Remark	Verdict
	Electronic displays with automatic brightness control (ABC) shall qualify for a 10 % reduction in $P_{measured}$ if they meet all of the following requirements:		N/A
(a)	ABC is enabled in the normal configuration of the electronic display and persists in any other standard dynamic range configuration available to the end user;		N/A
(b)	the value of $P_{measured}$, in the normal configuration, is measured, with ABC disabled or if ABC cannot be disabled, in an ambient light condition of 100 lux measured at the ABC sensor;		N/A
(c)	if applicable, the value of P measured with ABC disabled shall be equal to or greater than the on mode power measured with ABC enabled in an ambient light condition of 100 lux measured at the ABC sensor;		N/A
	(d) with ABC enabled, the measured value of the on mode power must decrease by 20 % or more when the ambient light condition, measured at the ABC sensor, is reduced from 100 lux to 12 lux;		N/A
	(e) the ABC control of the display screen luminance meets all of the following characteristics when the ambient light condition measured at the ABC sensor changes:		N/A
	— the measured screen luminance at 60 lux is between 65 % and 95 % of the screen luminance measured at 100 lux;		N/A
	— the measured screen luminance at 35 lux is between 50 % and 80 % of the screen luminance measured at 100 lux;		N/A
	— the measured screen luminance at 12 lux is between 35 % and 70 % of the screen luminance measured at 100 lux.		N/A

Table A	
Tests should be undertaken in accordance with EN 62087-1:2016, EN IEC 62087-7:2019, IEC 62087-1:2015, IEC 62087-7:2018.	
Model No.	DCM6
Rms input voltage (V)	DC5-20V
Input supply frequency (Hz)	--
Ambient Temperature (°C)	24.6
Ambient Humidity RH (%)	74
Airspeed, room m/s	0.5
Total harmonic distortion (THD) of the electricity supply system (%)	--
The input terminal for the audio and video test signals	Display Port
Screen Width (dm)	3.45
Screen Height (dm)	2.07
The visible screen area expressed (dm2)	7.14
Display resolution	1920X1080
Pmeasured (HDR)	10
Availability of forced menu((Yes or No)	Yes
The peak luminance of the on-mode condition of the dispaly (cd/m2)	300
Power Factor	0.742
Name of on-mode picture mode	Standard
EEI Calculation:	
For SDR	
EEIlabel according to (EU) No 2019/2021	0.28
On-mode energy consumption in kWh per 1000 h (for SDR)	10
Energy efficiency class (according to (EU) 2019/2013)	A
EEI according to (EU) 2019/2021	0.28
On-mode energy consumption in kWh per 1 000 h (for HDR)	10
Energy efficiency class	A

Energy consumption test (On mode and peak white luminance)

Portable LCD Display
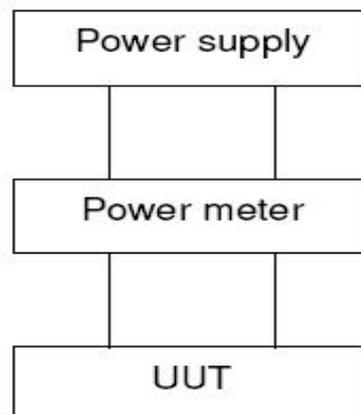Model: DCM6
Input: 5.0-20V⎓5.0AMAX

CE 🚮 Cd

Importer: XXXXXX
Address: XXXXXXXX
Made in China

Rating Label (Representative)

Testing circuit

Photos of the appliance (Representative):
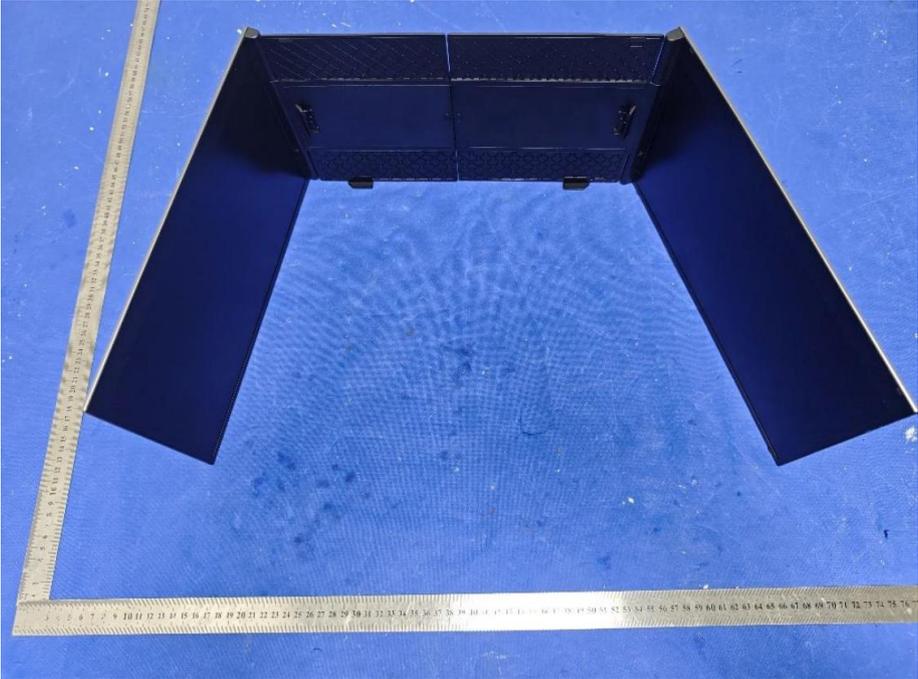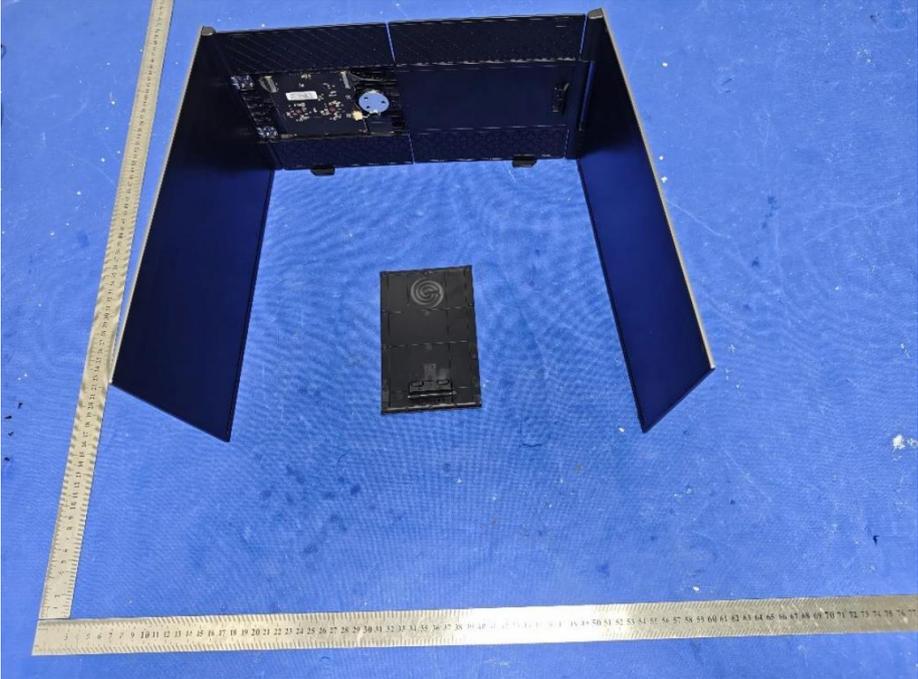
Photo 1

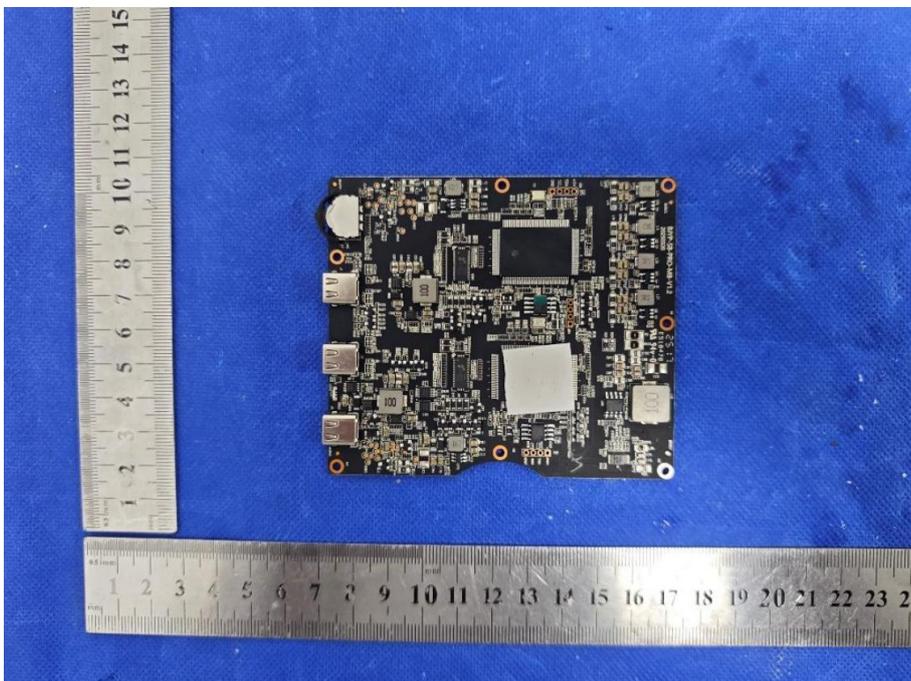
Photo 2

Photo 3

Photo 4

Photo 5

Photo 6

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