

## **RF EXPOSURE REPORT**



Applicant: Manufacturer:	Immedia Semiconductor LLC. 100 Riverpark Drive, Suite 125 North Reading, MA 01864, United States of America Immedia Semiconductor LLC. 100 Riverpark Drive, Suite 125 North Reading, MA 01864, United States of America
Product Name:	Camera
Brand Name:	blink
Model No.:	BCM00700U
Model Difference:	N/A
Report Number:	TESA2310000647ES
FCC ID	2AF77-H2311821
Date of EUT Received:	October 30, 2023
Issue Date:	December 13, 2023
	C185-W 01004-047

John Teh Approved By

### We hereby certify that:

The above equipment was evaluated by SGS Taiwan Ltd. The evaluation in this report is in compliance with FCC Rule Part §1.1307.

The results of this report relate to the specific sample identified in this report.

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Revision History									
Report Number Revision		Description	Description Issue Date		Remark				
TESA2310000647ES	TESA2310000647ES 00 Original		December 13, 2023	Violetta Tang					

Note:

1 • The remark "\*" indicates modification of the report upon requests from certification body.

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No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.



### **DESCRIPTION OF EQUIPMENT UNDER TEST (EUT)** 1

### 1.1 **Product Description**

Product Name:	Camera
Brand Name:	blink
Model No.:	BCM00700U
Model Difference:	N/A
Hardware Version:	PVT
Firmware Version:	N/A
EUT Series No.:	TE_SP_2023103001
Power Supply:	5V

### 1.2 **Evaluation site**

Laboratory		Site Address	FCC Designation number	ISED Company Number	CAB Identifier
SGS Taiwan Ltd. Central RF Lab. (TAF code 3702)		No. 134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, 24803, Taiwan.	TW0027	4620A	
	$\boxtimes$	No. 2, Keji 1st Rd., Guishan Township, Taoyuan County, 333 Taiwan.	TW0028	4620E	TW3702
		1F, No. 8, Alley 15, Lane 120, Sec. 1, Nei Hu Road, Neihu District, Taipei City, 222 Taiwan.	TW0029	23862	

#### **Antenna Information:** 1.3

### 1.3.1 BT / WLAN 2.4GHz

Antenna Type	Supplier	Freq. (MHz)	Peak Antenna Gain (dBi)
Monopole	Immedia Semiconductor LLC	2.4GHz	3.40

Note: Antenna information is provided by the applicant.

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## 2 DETEMINATION OF MPE EXEMPTION

## 2.1 FCC

## 2.1.1 Single RF Source

- As per §1.1307(b)(3)(i),
- (A) The available maximum time-averaged power is no more than 1 mW, regardless of separation distance. This exemption may not be used in conjunction with other exemption criteria other than those in paragraph (b)(3)(ii)(A) of this section. Medical implant devices may only use this exemption and that in paragraph (b)(3)(ii)(A);
- (B) Or the available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold  $P_{th}$  (mW) described in the following formula. This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive).  $P_{th}$  is given by:

$$P_{th} (mW) = \begin{cases} ERP_{20 \ cm} (d/20 \ cm)^x & d \le 20 \ cm \\ \\ ERP_{20 \ cm} & 20 \ cm < d \le 40 \ cm \end{cases}$$

Where

$$x = -\log_{10}\left(\frac{60}{ERP_{20\ cm}\sqrt{f}}\right) \text{ and } f \text{ is in GHz};$$

and

$$ERP_{20 \ cm} \ (\text{mW}) = \begin{cases} 2040f & 0.3 \ \text{GHz} \le f < 1.5 \ \text{GHz} \\ \\ 3060 & 1.5 \ \text{GHz} \le f \le 6 \ \text{GHz} \end{cases}$$

d = the separation distance (cm);

**Note:** when 10-g extremity SAR applies, SAR test exemption may be considered by applying a factor of 2.5 to the SAR-based exemption thresholds.

(C) Or using Table 1 and the minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. For the exemption in Table 1 to apply, R must be at least  $\lambda/2\pi$ , where  $\lambda$  is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of  $\lambda/4$  or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

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## Table 1 to § 1.1307(b)(3)(i)(C) -Single RF Sources Subject to Routine Environmental Evaluation

RF Source frequency (MHz)		Minii	mum Dist	tance	Threshold ERP (W)	
fL		fH	λL / 2π	π λ <b>Η / 2</b> π		
0.3	-	1.34	159m	-	35.6m	1920 R <sup>2</sup>
1.34	-	30	35.6m	-	1.6m	3450 R <sup>2</sup> /f <sup>2</sup>
30	-	300	1.6m	-	159mm	3.83 R <sup>2</sup>
300	-	1500	159mm	-	31.8mm	0.0128 R <sup>2</sup> f
1500	-	100000	31.8mm	-	0.5mm	19.2R <sup>2</sup>

R= minimum separation distance in meter

f = frequency in MHz

### 2.1.2 **Multiple RF Sources**

In the case of fixed RF sources operating in the same time-averaging period, or of multiple mobile or portable RF sources within a device operating in the same time averaging period, if the sum of the fractional contributions to the applicable thresholds is less than or equal to 1 as indicated in the following equation.

$$\sum_{i=1}^{a} \frac{P_i}{P_{th,i}} + \sum_{j=1}^{b} \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^{c} \frac{Evaluated_k}{Exposure\ Limit_k} \le 1$$

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## 2.1.3 Single RF Source Evaluation Results

Chain 0	Frequency (MHz)	Max. tune-up power (dBm)	Peak gain (dBi)	ERP (dBm)	ERP (W)	Permissible Minimum separation distance ( $\lambda/2\pi$ ) (m)	R = actual Minimum separation distance(m)	ERPth (W)	ERP/ERPth
WiFi 2.4GHz	2462	18.31	3.4	19.56	0.090	0.0194	0.200	0.768	0.117
BLE	2480	4.39	3.4	5.64	0.004	0.0193	0.200	0.768	0.005

### Note:

1. For conservativeness, the lowest uplink frequency of each band is used to determine the minimum separation distance of that band. All the single RF source results (P or ERP) are less than their corresponding threshold (Pth or ERPth), so they are exempt from RF exposure testing.

2. The simultaneous transmission is not available for this device.

~ End of Report ~

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