Device Name: **GSM2378**

FCC ID: **MIVGSM2378**

Justification for 10mm test separation distance for GSM2378

The FCC was contacted and based on the documents provided the DUT meets the requirements for SAR exclusion based upon source-based, time average output power. The following KDB tracking number 621615 was acquired for the inquiry.

As per document ***"GSM2378 Calculations"*** the device output power with most conservative operation consideration is as follow:

- GSM850 = 25mW
- PCS1900 = 12.5mW

The device is mounted in vehicles and plugged into the OBD II plug which is mounted within the dashboard region. It is not body-worn and therefore does not come into direct contact with the user.

Based on the device output power a separation distance of 10mm is applicable.

Therefore the following Limits for SAR are applicable: as per FCC KDB procedure 447498 D01 Mobile Portable RF Exposure v05. For exclusion distance:

Appendix A

SAR Test Exclusion Thresholds for 100 MHz – 6 GHz and ≤ 50 mm

Approximate SAR Test Exclusion Power Thresholds at Selected Frequencies and Test Separation Distances are illustrated in the following Table.

MHz	5	10	15	20	25	mm
150	39	77	116	155	194	SAR Test Exclusion Threshold (mW)
300	27	55	82	110	137	
450	22	45	67	89	112	
835	16	33	49	66	82	
900	16	32	47	63	79	
1500	12	24	37	49	61	
1900	11	22	33	44	54	
2450	10	19	29	38	48	
3600	8	16	24	32	40	
5200	7	13	20	26	33	
5400	6	13	19	26	32	
5800	6	12	19	25	31	

Conclusion:

- SAR is not required at GSM850 Band as output power < SAR Test Exclusion Threshold (25mW) for 835 MHz at 10mm separation.
- SAR is not required at PCS1900 Band as output power < SAR Test Exclusion Threshold (12.5mW) for 1900 MHz at 10mm separation.