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Global Product Certification
EMC-EMF Safety Approvals

FCC RF Exposure Report

Report Number: M160508-6

Test Sample:	Platform Card Processor
Model Number:	PCP6100
FCC ID	2AIKG-PCP6100
Tested For:	Vix Technology
Date of Issue:	06 September 2016

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FCC RF Exposure Evaluation Report

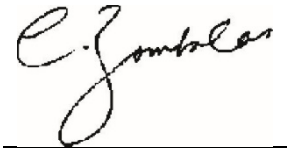
Report Number: M160508-6

Test Sample:	Platform Card Processor
Model Number:	PCP6100
Serial Number:	S16211749
Manufacturer:	Vix Technology
Tested for:	Vix Technology
Address:	Level 4, 50 St Georges Tce, Perth 6060, Western Australia
Phone:	+61 (0) 8 6180 4613
Contact:	Gino Bertino
Email:	gino.bertino@vixtechnology.com
Test Standard/s:	**FCC KDB 447498 D01 General RF Exposure Guidance v6** Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies. **FCC Title 47, Part 2.1091, Part 1.1310**
Result of Test:	**Platform Card Processor model PCP6100 complies with the requirement of KDB 447498 D01 and with FCC Title 47, Part 2.1091, Part 1.1310**
Test Dates	6 September 2016

Test Engineer:

Emad Mansour
EMC/EMR/SAR Engineer
M.Sc. in Telecommunication

Authorised Signature:



Chris Zombolas
Technical Director
EMC Technologies Pty Ltd

1 INTRODUCTION

This report shows the Maximum permissible exposure (MPE) on Platform Card Processor model PCP6100, in accordance with the Federal Communications Commission (FCC) regulations as detailed in KDB 447498 D01,

The test sample was provided by the Client. The conclusion herein is based on the information provided by the client.

2 EXPOSURE EVALUATION FOR MOBILE DEVICE

A mobile device is defined as a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at least 20 centimeters is normally maintained between the transmitter's radiating structure(s) and the body of the user or nearby persons.

Radio frequency radiation exposure evaluation for mobile devices as defined by (47 CFR §2.1091).

3 GENERAL INFORMATION

(Information supplied by the Client)

The Equipment Under Test (EUT) was identified as follows:

Test Sample:	Platform Card Processor
Model Number:	PCP6100
Manufacturer:	Vix Technology
Radio Module:	Contactless Card Reader
Operating frequency (MHz):	13.56
EIRP*	0.353 μW

*For EIRP value refers to test report M160508-5 issued by EMC Technologies, Field strength measured at 10m was 50.25 dBμV/m.

4 TEST SAMPLE DESCRIPTION and TEST SETUP DETAILS

(Information supplied by the Client)

The device is intended to be used by Transport operators for fare collection. The device is typically installed inside the transport vehicle for use by passengers to tag ON and tag OFF with their travel card.

5 MAXIMUM PERMISSIBLE EXPOSURE (MPE) LIMITS

The criteria listed in table 1 shall be used to evaluate the environmental impact of human exposure to radiofrequency (RF) radiation

Table 1:

Frequency range(MHz)	Electric field strength(V/m)	Magnetic field strength(A/m)	Power density(mW/cm^2)	Averaging time(minutes)
A) Limits for Occupational/Controlled Exposures				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f^2)	6
30-300	61.4	0.163	1	6
300-1500			f/300	6
1500-100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f^2)	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100,000			1	30

f = frequency in MHz

* = Plane-wave equivalent power density

6 RF EXPOSURE EVALUATION

The MPE was evaluated at 20 cm to show compliance with the power density listed in table 1,

The following formula was used to calculate the power density at 20 cm

$$S = \frac{P * G}{4\pi R^2}$$

$$S = \frac{EIRP}{4\pi R^2}$$

Where

(S): Power density (mW/cm^2)
(P): Output power at antenna terminal (mW)
(G): Gain (ratio)
(R): Minimum test separation distance (20 cm)

Table 2: RF Exposure evaluation at 20 cm

Technology	Frequency	Power	Gain	EIRP	EIRP	Duty Cycle	Flux Density at 20 cm	Flux Density limit	
	MHz	dBm	dBi	dBm	(µW)	%	mW/cm^2	mW/cm^2	(%)
cardless	13.56	-	-	-	0.353	100	0.0001	0.979	0.01%
Total percentage of the limit at 20 cm									0.01%

The percentage of the limit for all the power densities at 20 cm is 0.01% of the general public limit.

7 CONCLUSION

The Platform Card Processor model PCP6100 complies with the requirement of KDB 447498 D01 and with FCC Title 47, Part 2.1091 and Part 1.1310 in mobile exposure condition for a separation distance of more than 20 cm.