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EMC Ref 50307

Re FCC ID: Q47-MCR500

Application for a Class II permissive change in accordance with FCC Part 2 clause 1043.

During operation of the MCR500 in the field, it has been identified the unit lacks sensitivity and that the card would not fit into all hosts.

On investigation, the following problems were identified and fixes provided:

1. The lack of sensitivity was traced to the receiver IC. After consultation with the manufacturer of the receiver IC, it was determined that the receiver IC should be supplied from a 5 Volt supply not the 3.3V as used in the original design. The circuit has been changed to include a new 3.3 V to 5 V DC to DC converter. Details of the new circuit can be found in Appendix D, page 3.
2. It was also found that the length of the card made it impossible to be installed into all hosts. It was determined that by reducing the length of the antenna loop board it would allow installation into the majority of hosts.

To support this application we have performed full testing on both the standard MCR500 and the MCR500 short version. Reports T50307 A & T50307B are attached

Should you require any additional information please contact me at: [les@emctech.com.au](mailto:les@emctech.com.au).

Kind Regards

Les Dickenson  
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EMC Technologies Pty Ltd

Attachments  
Form T731  
EMC Reports T50307\_A T50307\_B