

DATE : 2010-07-15

Model Justification Letter for the Area Controller and Area Controller Router

FCC ID: W3BNEXUSAC

IC ID: 8100A-NEXUSAC

Product Name:

- Nexus **A**rea **C**ontroller (AC) model # 199.0555
- Nexus **A**rea **C**ontroller **R**outer (ACR) model # 199.0578

This letter is to confirm the similarity of these two units.

The **A**rea **C**ontroller **R**outer is the same unit as the **A**rea **C**ontroller but without these three options:

- keyboard
- display
- battery backup

These two units have the same:

- mother board
- software
- processor
- memory
- IO ports
- Supply
- modular RF Modem
- RF configuration (antenna, output power and frequency operation)

See Figure 1 (Diagram Block Nexus AC) and Figure 2 (Diagram Block Nexus ACR) for details.

The ACR (Router) is a cheaper version of the AC. It only uses for expanding the RF network. An Area Controller could manage up to 100 nodes. For a bigger network we must add other(s) controller(s). It is the reason why we created this de-populated version of controller, for reducing the cost of this network.

We use the same FCC/IC ID labels for these two units, only the model number will change. See Figure 3 (Label installation) and Figure 4 (Label model) for details.

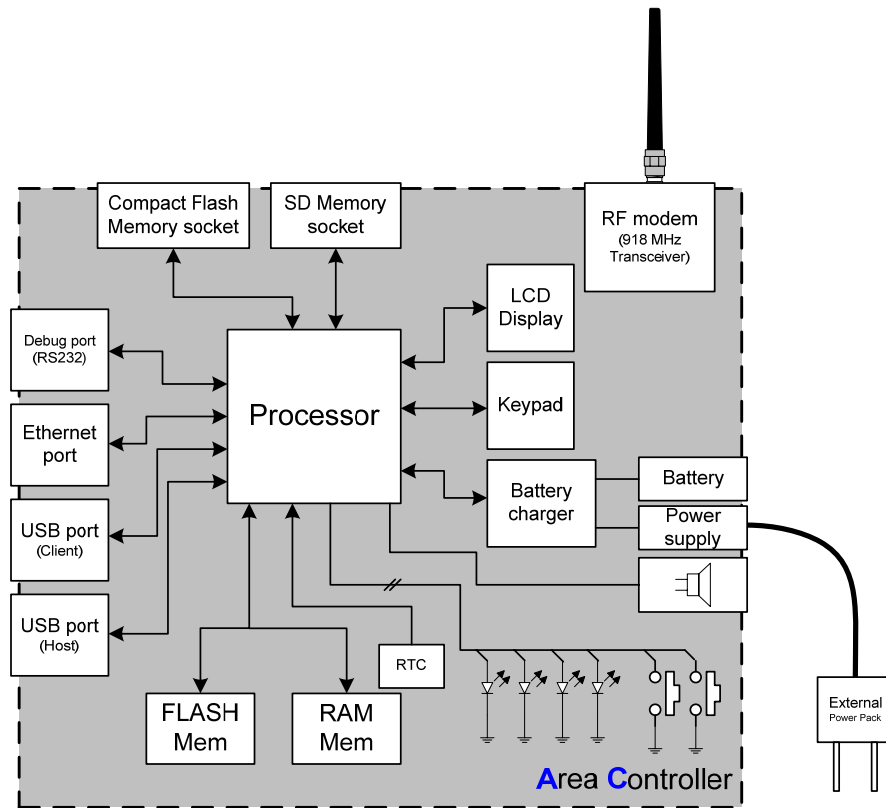


Figure 1 (Diagram Block Nexus AC)

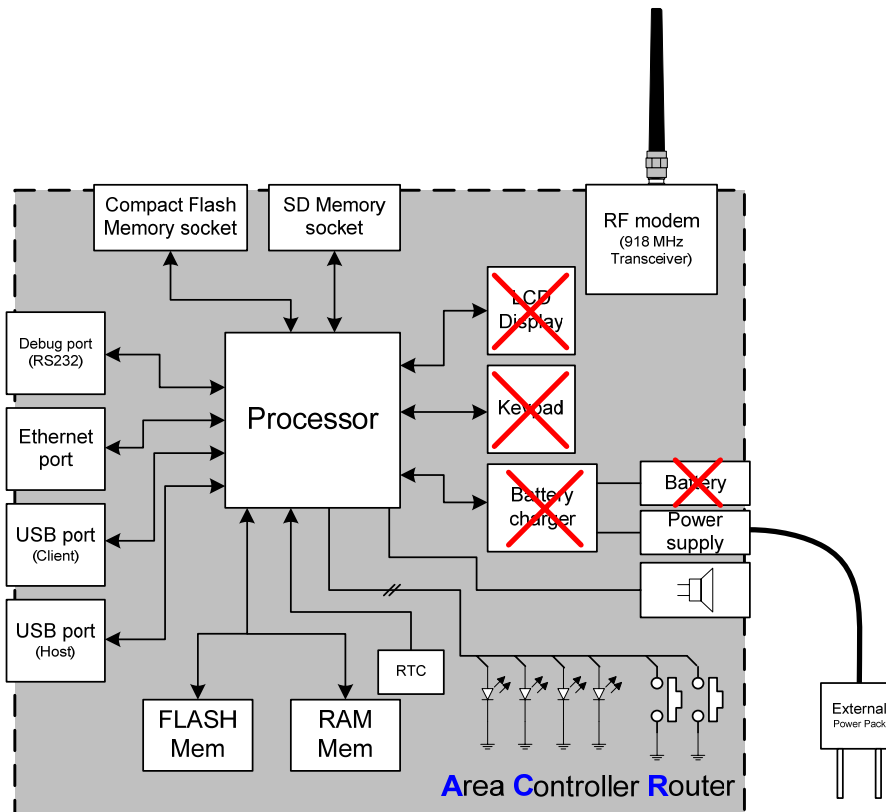


Figure 2 (Diagram Block Nexus ACR)

The Model No. is a variable field and depends of the Area Controller type. The Area Controller full option is called AC and the Area Controller de-populated is called ACR

AC = 199.0555
ACR = 199.0578

Label for the AC and the ACR ^{US version}

1.00"

Thomas&Betts IC: 8100A-NEXUSAC FCC ID: W3BNEXUSAC Model No.: 199.0555

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

791.3375

3.50"

Label for the AC and the ACR ^{Canada version}

1.00"

Thomas&Betts IC: 8100A-NEXUSAC FCC ID: W3BNEXUSAC Model No.: 199.0555

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

Cet équipement est conforme à la section 15 de la réglementation de la FCC. Son fonctionnement est sujet aux deux conditions suivantes :

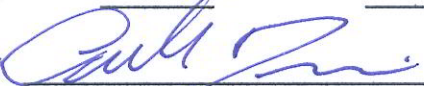
(1) cet équipement ne doit pas produire d'interférences nuisibles et
(2) il doit pouvoir supporter toutes interférences reçues, même si ces interférences perturbent son fonctionnement.

791.3379

3.50"

Figure 4 (Label model)

Dated this 15 Day of July 2010

By:  Camille Descarries
Signature Printed

Title: Team leader R&D

On behalf of : (Thomas and Betts)

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