

Next-Generation Digi Connect ME Upgrade



Family Enhancements

- **RoHS (Restrictions of Hazardous Substances)**
 - RoHS compliant products ban heavy metals, including lead, and brominated flame retardants – complies with new European standards and similar initiatives world wide
 - Expected to be fully compliant in December 2004
- **Improved ESD performance**
 - ESD performance exceeds FCC Class B.
 - Eliminates shielded Ethernet cable requirements
- **Full HALT (Highly Accelerated Life Test) verification**
 - Thermal Step Stress
 - Cold start -80C/+100C
 - Rapid Thermal Transition
 - -55C to +95C (transition rates of 50C per minute with 10-minute dwelling at setpoints)
 - Vibration Step Stress
 - 55/60 Grms (root-mean-square acceleration)
 - Combined Environment
 - Thermal transaction and vibration
- **Mounting improvements**
 - Backwards-compatible three-point mounting approach (front tabs + main pin header) for additional hardware integration flexibility
- **Extended Boot Loader Architecture (-C version only)**
 - More available Flash memory (+~256KB)
 - Boot loader customization option
 - Improved seamless boot loader migration to chip-based solution
 - Allows easy deployment of non-NetSilicon operating systems (e.g. uClinux, eCos, etc.)



Pb-FREE

Next Generation Connect: General Information

■ Connect Family Enhancement

- Changes are being made within the product line SKUs
- Part numbers clearly identify available module versions
- Mechanical design and pin-outs fully compatible

■ Connect Integration Kit: -S “Standard”

- Integration Kit modules use Digi plug-and-play firmware for rapid integration and fast time-to-market
- Simple and straight-forward transition from previous module to next-generation module by using new part number

■ Connect Development Kit: -C “Custom”

- Development Kit modules for customer specific applications created using the NET+Works development kit
- Existing applications must be recompiled to create new firmware image supporting the next-generation modules

Connect Integration Module Upgrade Path



1



DC-ME-01T



Plug-and-Play
(Integration kit)
DC-ME-01T-KT



DC-ME-01T-S

Product:

Applications using standard
Digi plug-and-play firmware

Customer Profile:

Evaluating product or in production

Customer Action:

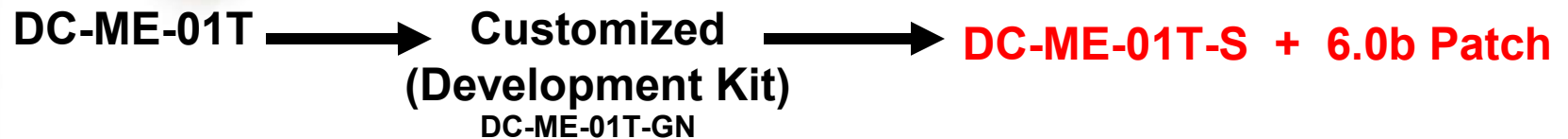
Change to DC-ME-01T-**S** model

- Seamless software migration to wireless Digi Connect Wi-ME module

Connect Development Module Upgrade Path



2



Product:	Applications created using NET+OS v6.0b
Customer Profile:	In-Production with need for common firmware image supporting previous and next-generation modules
Action Needed:	Install provided software patch Change to DC-ME-01T-S model

- Application STAYS ON NET+OS 6.0b
- Image runs on both DC-ME-01T and DC-ME-01T-S units
- No NET+OS 6.0b support for wireless Digi Connect Wi-ME modules

Connect Development Module Upgrade Path



3



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- Product:** Applications created using NET+OS v6.0b
- Customer Profile:** In-production with need for common firmware image supporting previous and next-generation modules, and upgrade path to current and future NET+OS releases
- Action Needed:** Install current NET+OS release plus LSK (Legacy Support Kit)
Change to DC-ME-01T-S model

- Application moves to most current NET+OS release
- Image runs on DC-ME-01T and DC-ME-01T-S units
- Full NET+OS support for wireless Digi Connect ME module

Connect Module Development Upgrade Path - Recommended



4



DC-ME-01T



Customized
(Development Kit)



DC-ME-01T-C

DC-ME-01T-GN

Product:

Applications created using NET+OS v6.0b

Customer Profile:

Evaluation or development underway

Action Needed:

Install current NET+OS release

Change to DC-ME-01T-C model

- Application moves to most current NET+OS release
 - Image runs on DC-ME-01T-C units only!
- Boot loader customization options and “open” Flash memory
- Full NET+OS support for wireless Digi Connect ME module

New Part Numbers

- **No change to part numbers for integration or development kits**
 - Integration kits contain “-S” models
 - Development kits contain “-C” models

- **Two versions of the modules are being offered**
 - Standard firmware (plug-and-play) – “-S” model
 - Customizable firmware (developer version) – “-C” model
 - Modules are clearly labeled “CF/W”.

- **Current DC-ME-01T module will be phased out**

Current P/N	New P/N	Description
DC-ME-01T-KT	DC-ME-01T-KT	Digi Connect ME Integration Kit
DC-ME-01T-GN	DC-ME-01T-GN	Digi Connect ME Development Kit
DC-ME-01T	DC-ME-01T-S	Digi Connect ME (Standard firmware)
	DC-ME-01T-C	Digi Connect ME (Customizable)

Summary

- **Next Generation Digi Connect ME provides product family enhancements**
 - Full RoHS compliance by December 2004
 - Improved ESD performance
 - Additional HALT verification
 - Backwards-compatible three-point mounting for additional hardware integration flexibility

- **Development Kit Module enhancements (-C version only)**
 - More available Flash memory (+ ~200KB)
 - Boot loader customization option
 - Seamless boot loader migration to chip-based solution
 - Allows easy deployment of non-NetSilicon operating systems (e.g. uClinux, eCos, etc.)

- **Simple migration to new part numbers**
 - Tools available to support customers during product transition