

MICROCONTROLLER TECHNOLOGY OTP PROGRAMMER SUPPORT APPLICATION NOTE

SUBJECT: DM (Debug Module) Programming Yields for SOIC devices.

PROBLEM and SYMPTOMS:

The DM has a history of poor programming yields when using the on-board SOIC open-top socket. It is difficult to get devices in and out, and the contacts are not reliable.

Device pins may be bent during insertion, extraction.

SCOPE:

This problem can occur with any COP8 Family SOIC device. It is a programming yield issue ONLY, and any devices that pass program/verify are good.

SOLUTIONS:

1. The DM is an evaluation and development tool, and is not approved for volume programming of any OTPs. Use only third-party programmers approved for Production use: Approved Programmer List .
2. Instead of the on-board SOIC socket, use a standard 28SO-to-28DIP, lidded programming adapter inserted in the 40 pin DIP socket. This 1-1 adapter is commonly available from any programmer or adapter vendor. The ENPLAS lidded socket is recommended.

National may have a limited supply of these adapters available for purchase in boxstock:
pn# COP8-PGMA-28SO.

For more information contact Dave Katra by EMAIL: dave.katra@nsc.com.
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