

November 12, 2020

End of Life Notification for MCF5272 Based Products

We have been notified by NXP Semiconductor that the ColdFire MCF5272 microprocessor is going End of Life (EOL) in October 2021. The processor was introduced in 2000, so it will have had a lifespan of 21 years. The NetBurner standard products affected are:

- MOD5272-100IR
- SB72-301
- SB72EX
- CFV2-66M

We will be accepting orders for these devices through September 1, 2021. It is not yet clear from NXP if processor lead times will be affected, so it is highly recommended that purchases be planned with as much lead time as possible.

The good news is that there is an upgrade path for these devices to newer products that offer significantly more performance, features, as well as up to a 57% cost reduction depending on the device.

Benefits for developers

In over 50 test cases that we have run internally and with customers, the average time to update a software application ranged from 1 to 7 days. We will be offering free technical support to assist you with the process. Some benefits to upgrading include:

- Significantly higher performance with processors such as the 300MHz ARM SAME70 or 250MHz ColdFire MCF54415.
- Free security package for the latest ciphers and TLS 1.3.
- Development tools that run on Windows, OSX and Linux.
- Devices can be updated and configured from any platform and do not rely on Windows utilities.
- For additional details please see the <u>migration section of the manual</u>.

Suggested Migration

SB72EX to SB800EX

The <u>SB800EX</u> has the same form factor as the SB72EX. If you are using the NetBurner Serial-to-Ethernet software, then the only change is a more full-featured application that includes TLS and HTTPS security, and jumper-less configuration for RS-232, RS-485 and RS-422. If you have written your own application, it will need to be recompiled with the latest tool set, currently 2.7.7 (IPv4 only) or 2.9.3 (dual stack).

MOD5272 to MODM7AE70

The <u>MODM7AE70</u> is a 300MHz ARM based module with identical mechanical dimensions and mounting. We have written an <u>application note</u> on the software changes and a <u>signal pin comparison chart</u>.

Test cases with customers found that most signals used were identical. There is also a tremendous price difference. The single piece price of the MOD5272 is \$139, while the MODM7AE70 sells for \$79. That is a difference of 57%. The development tools revision for the MODM7AE70 is 3.3, and docs for these tools can be found here.

SB72-301IR/CR

There are a number of options to consider, depending on whether you are using TTL, RS-232 or RS-485/422. Please contact NetBurner Sales sales@netburner.com for assistance.

Selecting a Development Toolchain

When updating your platform you will have up to 3 choices for a tool chain:

- 2.7.7, SB800EX. This is the oldest tool chain and only supports IPv4 addressing. If you are using this version or earlier, your application should build with little or no changes.
- 2.9.3, SB800EX. Supports IPv4/IPv6 dual stack. Minor code changes usually occur since the IPADDR type can now support either IP address size. Recommended over version 2.7.7.
- 3.3, SB800EX and MODM7AE70. Our latest version, providing the most recent compiler, eclipse IDE and features. The same application code changes as in 2.7.7 to 2.9.3 are necessary, as well as some operating system and initialization calls. 3.x was written from the ground up to be the best tool set available. Please see our <u>migration guide</u> for details.

In addition, 2.9.3 and 3.3 have the latest SSL/TLS encryption capabilities and ciphers.

All of us here at NetBurner want you to know we are committed to making this transition as easy as possible. Whether you need to just rebuild an application or need to port from a MOD5272 to the MODM7AE70, we are here to help.

Sincerely,

The NetBurner Team