

March 1, 2010

**SUBJECT:** Product Support for the MicroNetTMR 68040CPU module and related MicroNet, MicroNetTMR, and 5009 control systems.

Woodward introduced its MicroNet, MicroNetTMR and 5009 based 68040CPU module in 1997. Since that time both the module and the related products that used this module (MicroNet, MicroNetTMR, and 5009 control system) have enjoyed success in the market and continue to be an important part of our complete control offerings.

Because of the market demand for improvements to Woodward's MicroNetTMR and 5009 control systems, Woodward created a new improved CPU module in January 2009; referenced as the CPU5200TMR module. This new CPU5200 module was designed as a replacement for the existing 68040CPU module and has the following advantages: (3 x greater horsepower, included Ethernet communications, included real-time network communications to expansion chassis, and included isolated Serial communications port).

For MicroNet and MicroNetTMR platform users who desire to upgrade their existing system(s) with this new CPU module please contact the related system OEM or one of Woodward's RTRs (recognized turbine retrofitters) to review your specific system and perform the system upgrade. Note that although the CPU modules can be directly replaced physically, a system software operating system (Coder) upgrade is also required for any related system upgrades.

New 5009FT control systems were released February 16<sup>th</sup>, 2010 and include the new CPU5200TMR modules and improved Kernel Power Supply modules. For existing 5009 control users who desire to upgrade their existing system(s) with the new CPU5000TMR module, Woodward is scheduled to release a 5009FT upgrade kit in the near future (including three CPU5200TMR modules, three new Kernel Power Supply modules, new software service tool, and optional operator HMI). Please contact one of Woodward's RTRs (recognized turbine retrofitters) to review your specific system and perform a system upgrade. Please note that with the exception of CPU modules and Kernel Power Supplies, Woodward's new 5009FT systems include the same basic components, modules, and functionality as the older 5009 systems and can be used as a direct replacement.

As post production support is an important part of Woodward's Tier-one service, and to fully support MicroNet, MicroNetTMR, and 5009 owners/users globally, Woodward has developed the following the product support plan to ensure years of product operation and factory support for both the 68040CPU and 5009 control systems:

January 30, 2009:

- CPU5200TMR module is released

Fall 2010:

- 5009FT system upgrade kit(s) scheduled for release

January 30, 2009 – January 1, 2011:

- Migrate all new MicroNetTMR and 5009 systems to CPU5200TMR module

- Unlimited 68040CPU module spare modules are available
- Unlimited 68040CPU module repairs are available
- 68040CPU module replacement exchange with available service stock units
- CPU5200TMR module replacement is available

January 1, 2011 - 2016:

- 68040 CPU module production stopped for new systems
- Production of old 5009 part numbers stopped (replaced by new 5009FT part numbers)
- Limited 68040CPU spare modules are available based on parts availability
- Unlimited ProTech203 repairs are available
- 68040CPU module replacement exchange with available service stock units
- CPU5200TMR module replacement is available

January 1, 2016 - 2021:

- 68040CPU module repairs are available based on parts availability
- 68040CPU module replacement exchange with available service stock units
- CPU5200TMR module replacement is available

January 1, 2021 - 2031:

- 68040CPU module replacement exchange with available service stock units
- CPU5200TMR module replacement is available
- 68040CPU module design drawings are available such that customers can produce or repair the unit themselves (with signed "Proprietary Drawing and Assumption of Liability and Release Agreement")

Parts obsolescence from electronic manufacturers can present a challenge to post-life support plans. Woodward strives to hold inventory, or look for alternative parts when components are obsolete. However, there are times when components can simply not be obtained and where sufficient last-time buys cannot be made. In these cases, Woodward cannot always guarantee that we can maintain the rationalization support plan.

Best Regards,

Rich Kamphaus  
Turbomachinery Controls Product Line Manager  
Woodward - (rich.kamphaus@woodward.com)