MGCplus CP52 Communication Processor Version 5.8.4

<u>Legend:</u>

FUN: functional enhancement

MOD: modification FIX: bug fix

Version 5.8.4

Fixes

FIX1: Error in handling negative float values

When acquiring data from CP52 via low-level commands, negative values in float format where not transmitted correctly.

FIX2: ML38B sync

ML38B synchronization was not stable. Initialization during boot-up now resets synchronization status leading to higher stability.

Version 5.6.1

New functions

FUN1: PTPv2 synchronization

CP52 now supports synchronization via PTPv2.

FUN2: Recording on NFS server

CP52 now supports direct recording onto an NFS server.

Modifications

MOD1: NTP setup parameters

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It is now possible to manually set minpoll and maxpoll parameters when using NTP as asynchronization mechanism.

Fixes

FIX1: Synchronization of CANHEAD measurement

Start signal detection of ML74B has been improved to get better synchronization of CANHEAD measurements.

Version 5.3.4

Fixes

FIX1: File system type detection

In some cases the file system type of connected recording media was not recognized correctly.

Version 5.3.3

Fixes

FIX1: Reserved FIFO size for first client

The FIFO reserved for the first client connected to CP52 has been increased from 15 MB to 114 MB. This allows having a much larger pre-trigger and post-trigger when using the CP52's measurement rate trigger

FIX2: Sync monitor in catman Enterprise showing out of sync

When using the sync monitor in catman Enterprise with a DAQ system containing two or more CP52s from time to time some of the CP52s were shown as out of sync.

In any case the CP52s were synchronized, but there could have been a difference of one 75 Hz tick in the HZR counter as the time for resetting the counter at measurement start was too short. Please note that this issue can still occur when having a system in which CP52 is the sync master and CP42 is the sync slave.

FIX3: Acquiring single CANHEAD channels

When putting only single channels of one CANHEAD in the MGCplus Assistant scope sometimes measurement values from other channels of the same CANHEAD were shown. This was never observed in catman Easy/AP or catman Enterprise. Now it also works correctly in the MGCplus Assistant scope.

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Version 5.3.2

Fixes

FIX1: Boot loader stability

In very rare cases the boot loader could stay in configuration mode during boot-up due to disturbances from the environment. The behavior has been improved, the issue cannot occur anymore.

Version 5.3.0

Fixes

FIX1: Enhancement of SCM command

Treatment of corrupt parameter set in storage device or CP has been improved.

FIX2: ABxx restart after ML update

The restart of ABxx after a firmware update of one or more MLs is more stable now.

FIX3: Behavior of DBG56?

Online synchronization test in catman Enterprise and synchronization test in system test procedure failed due to wrong reply to DBG56?. The behavior to DBG56? is corrected.

FIX4: Automatic recording on startup

Automatic recording on a mass storage device on startup has been improved. The CP makes sure the mass storage device is ready.

FIX5: Restart of ABxx

In certain cases a restart of the CP could lead to blocking of the ABxx startup process. This is now fixed.

FIX6: Improved stability of 75 Hz tick

 ${\rm SI514}$ regulator gives back generation of 75 Hz tick to VP on shutdown.

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Version 5.2.1

Modifications

MOD1: Behavior in error case

In case an ML module fails all error bits (gross, net, calibration) are set.

Fixes

FIX1: Measurement at sample rates > 2.4 kS/s per channel

Selecting a sampling rate higher than 2.4 kS/s (i.e. 4.8 kS/s or higher), measurement values were "upsampled".

FIX2: Support of manual IPv4 default gateway

At restart the settings for the IPv4 default gateway were not saved.

FIX3: Synchronization of ML38B

A short clock pause during booting occasionally caused a sync error of ML38B when booting the device.

FIX4: Retrieval of current values of ML455

Current value retrieval led to long waiting times in catman.

FIX5: NTP?10 behavior

The NTP?10 query now behaves the same way as CP42 does.

FIX6: Command POP93,1 or POP93,2

Now this command sets the digital output immediately. Before, a restart of the CP application was required.

Version 5.0.15

CP52 is the new communication processor for MGCplus. It replaces CP22 and CP42. The product release firmware is version 5.0.15.

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New functions

FUN1: Data storage

CP52 allows for autarkic data storage on USB mass storage devices.

FUN2: Ethernet interfaces

CP52 has two native Ethernet interfaces.

FUN3: CP52 supports the HBM Device Scan.

CP52 can be localized by the HBM Device Manager without knowing the IP address. The IP address can be changed or set to DHCP using the HBM Device manager.

FUN4: DHCP support

DHCP is supported by CP52.

FUN5: Max. number of channels

CP52 supports up to 512 channels, this is especially relevant when using ML71B (CAN) or ML74B (CANHEAD).

Modifications

MOD1: USB device connection

Direct USB connection to a PC is not possible anymore.

MOD2: Firmware update

The CP52 firmware can be updated from within the HBM Device Manager. Note: The firmware update only applies to the CP52 communication processor itself! Amplifier modules MLxx and the display and control unit AB22A cannot be updated in this manner - they still require the legacy MGCpload software.

MOD3: Deprecated commands

Several CP42 commands were deprecated as they have become obsolete. For details please refer to the document HBM_Deprecated_Commands.pdf on the MGCplus System CD.

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The software shown in the version chart has passed functional validation and quality assurance procedures (verification). To our best knowledge and expertise the software is bug free and qualified to be used in test & measurement tasks (IATF 16949).

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