Draco Tera / Extender – Firmware

Release Notes

Changes Matrix FW		
Date	**Version**	**Change**
2016-12-13	**MATXCPU V3.03 MATXIO8 V3.03**	**New Features and Enhancements:** • Full support of Draco tera 576/576S port matrix • Support of redundant controller board for Draco tera enterprise 48, 80 and 288 • Support of new extender series • Expansion of Matrix Grid to 24 matrices • Restart option for controller board • Support of 32 user and CON macros • Macro OSD list for executing macros • User and CON ACL: AND/OR assignment • Deactivation option of OSD at CON Units • CRC32 checksum for API interface • Multicast network communication **Improvements:** • Virtual CPU: Simultaneous assignment of one real CPU to various virtual CPUs • Accelerated update for controller boards and I/O boards • Update process of mismatched I/O boards • SNMP: Expansion of MIB with extender data for 2nd Link • SNMP: Traps for macros added • Initialization process for Matrix Grid • Synchronization between Grid Master and Sub matrices • Handling of Matrix Grid connections • Handling of I/O boards • Performance of TCP/IP interface • USB-HID communication to matrix • Online Config mode activation via configuration • Sequential switching option for macro commands • User login macro in Matrix Grid **Fixed Bugs:**

		• Cat X phyter: Initialization of extenders on I/O board • Temperature status for Draco tera 288 and 576 • Fix Frame option in Multi-Screen Control • Fix port handling for USB 2.0 extenders • Local computer switching of 481 series • Connection handling of previous switching • OSD communication to extender • User login in Matrix Grid
2016-03-29	MATXCPU V3.01	**New Features and Enhancements:** • Full support of redundant extenders in a single matrix or Matrix Grid • Single extender switching in multi-extender Device • 2nd SNMP server configuration • 2nd Syslog server configuration • Basic LDAP support • Change of OSD data (color, name, about) upon request • Echo function for media controllers in Matrix Grid operation • Support of various new extender types • Support of Russian keyboard layout in OSD • New type of macros based on prior login • Status request of redundancy via API • Support of Matrix Grid card • Extension of SNMP monitoring for Draco tera 576 • Extension of SNMP monitoring for redundant extender link **Improvements:** • Handling of OSD data during restart • Modification and management of FPGA design for CPU and I/O boards • Handling of Grid master in Matrix Grid • Accelerated status request in Matrix Grid • Grid Line information in Matrix Grid • Expansion of trace/syslog for LAN related messages • Time stamp of trace/syslog messages • Operation in Multi-Screen Control • Video Only switching in Port Mode • Temperature monitoring Draco tera enterprise 288 • Handling of CPU Scanner function • Increase of buffer size in the TCP/IP stack

		• Extender requests by matrix • Update process of I/O boards • Macro switching via SNMP traps • Expansion of OSD data port number • Firmware status view • Communication between CPU board and Cat X phyters on I/O board • Cat X phyter and SFP control and error handling • Registration process of newly connected extenders • Fan and temperature control • Startup sequence of I/O board • Handling of matrix grid communication • Block transfers for internal and external matrix communication established • Establishment of network socket connections **Fixed Bugs:** • Restart / shutdown of I/O boards • Update of I/O boards • Handling of Matrix Grid communication • Interaction with debug interface • Configuration management upon restart • OSD layout • OSD list cursor • Incorrect extender data of VCONs and VCPUs in OSD • LDAP login • SNMP • Draco tera 288 temperature management • Handling of extender port information • Status request for extender ports • Configuration of Cat X phyters during I/O board startup sequence • Temperature traps • Local CPU switching of non-redundant HDMI CONs
2015-01-28	**MATXCPU V3.00**	**New Features and Enhancements:** • Synchronized switching for operations consisting of multiple commands (e.g. macros) • Switching commands for port related switching in Full Access and Video Only mode • CPU connection info upon keyboard/mouse event in Video only or KVM sharing mode • Support of various new extenders types • Update of DVI-I CON Units (EXTICON)

		• New video mode 1680x1050 in OSD **Improvements:** • Master handling in Matrix Grid • Port handling of fixed port extenders (e.g. USB 2.0) • Update of redundant extenders • Update of KVM switching status for extenders on I/O board • CPU connection info on redundant extenders • Handling of OSD in Multi-Screen Control environment • Time monitoring for LAN module • Handling of LAN sockets • Handling of matrix flash data **Fixed Bugs:** • Synchronisation of system data in Matrix Grid • Handling of admin user in Matrix Grid • OID definition corrected (SNMP) • API handling of invalid CPU Devices • CPU selection in OSD • Auto logout • FIX Frame on second link (redundant extenders) • Search focus in CPU Selection List • KVM sharing in cascaded environment
2014-07-02	MATXCPU V3.00	**New Features and Enhancements:** • Automatic restart of replacement CPU board activating previous network settings • <F6> key status and sort mode for CPU selection list are saved • Default Device IDs set to 1001, 2001, 3001 and 4001 • Support of X-Key Stick (16 keys) to activate macros on the matrix **Improvements:** • Local KVM switching • Switching of USB 2.0 extenders • Multi-Screen Control switching • Update time for standard extender update reduced • Release timer for Mouse/Keyboard Connect • Management of Matrix Grid configurations • Connection handling for switching in Matrix Grid

		• Handling of status requests • Date and time stamp of Syslog messages • Echo function adjusted to socket management • Operation of network stack (VRRP) **Fixed Bugs:** • Restart process of Matrix Grid • Identification of extenders during restart • Switching of CON IDs via API • Handling of broadcast messages (network)
2016-06-09 **2016-10-17** **2016-07-06**	**MATXVOSD** **V3.24** **MATXOSL** **V3.12** **MATXVOSL** **V3.05**	**Improvements:** • Accelerated update **Fixed Bugs:** • XV grid line communication • Video only switching in Draco tera compact matrices
2015-04-17 **2015-04-17** **2014-06-24** **2015-10-15**	**MATXOSD** **V3.08** **MATXVOSD** **V3.23** **MATXOSL** **V3.10** **MATXVOSL** **V3.05**	**New Features and Enhancements:** • Support of Russian OSD **Improvements:** • Update of redundant extenders **Fixed Bugs:** • Downgrade option
2014-06-11 **2014-07-07**	**MATXOSD** **MATXOSL** **V3.04**	**New Features:** • Support of Draco vario repeaters **Improvements:** • Multi-Screen Control

Changes Extender FW		
Date	**Version**	**Change**
2016-10-31 2016-05-30 2016-05-30 2016-05-30 2016-06-28 2016-05-30 2016-05-30 2016-08-11 2016-05-30 2016-08-11 2016-05-30 2016-05-31 2016-05-31 2016-04-11 2016-04-11 2016-08-25	**CON Units** EXTCON V3.09 EXTICON V1.12 EXTRCON V2.12 EXTHRCON V1.22 EXTDLCON V1.51 EXTDPCON V1.08 EXVDPCON V1.15 ECTDPCON V1.08 ECVDPCON V1.15 EXTVCON V3.18 EXTHVCON V1.02 EXVDLCON V1.10 FZVDLCON V1.00 FZVDPCON V1.00 EXTOPS V1.00	**New Features and Enhancements:** • Switching on Dual-Head CPUs (EXTVCON) • \<Hotkey\>\<r\>\<h\>\<Enter\> for HID hardware reset • \<Hotkey\>\<r\>\<s\>\<Enter\> for HID software reset • Various new audio codes for 483 series • LOS timer in Config.txt (ENALOSTMR) • Microphone preamplification in Config.txt (GAIN=X) for extenders with balanced audio transmitter module • OPS Extender **Improvements:** • VGA signal per default (EXTICON) • USB 2.0 embedded connection in Video Only mode • Detection Dual-Head/Dual-Link (EXTDLCON) • Support of 3440 x 1440 resolution • Dithering filter ENADITHER (EXTCPU, EXTRCPU, EXTVCPU) • Audio support in Video Only mode • Bidirectional support of balanced audio upgrade module • Automatic cutting of EDID extension block (EXTCPU, EXCTRCPU, EXTVCPU) • Update improved **Fixed Bugs:** • Service Mode via backplane • EDID transmission of redundant extenders • USB 1.1 support of USB 2.0 embedded upgrade modules
2015-10-31 2016-07-14 2016-07-14 2016-06-14 2016-05-30 2016-06-06 2016-05-30 2016-08-11 2016-05-30 2016-08-11	**CPU Units** EXTCPU V2.47 EXTICPU V1.28 EXTRCPU V1.39 EXTHRCPU V1.14 EXTDLCPU V1.53 EXTDPCPU V1.07 EXVDPCPU V1.15 ECTDPCPU V1.07 ECVDPCPU V1.15	**New Features and Enhancements:** • \<Hotkey\>\<R\>\<H\>\<Enter\> for hardware reset and \<Hotkey\>\<R\>\<S\>\<Enter\> for software reset • Support of USB-HID Ghosting and EDID management through the matrix • Microphone preamplification in Config.txt (GAIN=X) for extenders with balanced audio transmitter module **Improvements:**

2016-06-08 EXTVCPU V3.11 2016-05-31 EXTHVCPU V1.02 2016-05-31 EXVDLCPU V1.09 2016-08-02 EXVICPU V0.92 2016-04-11 FZVDLCPU V1.00 FZVDPCPU V1.00	• Audio signal on both links available (redundant extenders) • USB 2.0 embedded connection in Video-Only mode • Compression control (EXTVCPU) • Timing for memory control (EXTDLCPU) • Detection Dual-Head/Dual-Link (EXTDLCPU) • Support of 3440 x 1440 resolution • Bidirectional support of balanced audio upgrade module • Update improved **Fixed Bugs:** • Parameter RELEASETIME=X • Link communication • RAM timing (EXTICPU) • Switching of redundant extenders • EDID transmission of redundant extenders • Audio transmission on HDMI (EXTHRCPU) • Color defect in right half of the screen
2014-06-12 EXTCON V3.00 **2014-06-11 EXTHRCON V1.10** **2014-06-12 EXTRCON V1.30**	**Improvements:** • USB 2.0 embedded connections supported in Multi-Screen Control mode • Compatibility with Dual-Head CPU extenders (482 series)
2014-02-04 EXTCPU V2.38 **2014-02-05 EXTCON V2.34**	**New Features and Enhancements:** • Support for extender SNMP function implemented • CENTERMODE parameter supports embedding Single-Link resolutions into a Dual-Link output • USB 2.0 embedded supported in Multi-Screen Control mode • Update of converter firmware (CONVGPU) for DVI-I CPU Units included • Update process for Dual-Link/Dual-Head extenders in standard mode included **Improvements:** • OSD communication between the KVM matrix and extenders improved • USB-HID switching of redundant CPU units available per default (CONFIG.txt)

		• *Local CPU* switching for Multi-Head Devices supported **Fixed Bugs:** • LOS frame of Cat X extenders corrected • Video generation for customized industrial displays corrected
2016-01-29 2016-01-29 2016-05-03	**EXTMSD V2.38** **EXTIMSD V1.22** **EXTDLMSD V1.27**	**New Features and Enhancements:** • New DISPLAY2 parameter selects second video channel of 482 Dual-Head CPU unit • Deletion of Config.txt recovers factory settings • Versioning of Config.txt file **Improvements:** • Manual extender update from Windows 8 computers • Differentiation of EDIDs (482 series only) **Fixed Bugs:** • Digital audio parameters for redundant CPUs • USB 1.1 support of USB 2.0 embedded upgrade modules
2013-06-11	**EXTMSD** **EXTIMSD** **V2.29**	**New Features and Enhancements:** • New EDID with 1080p default for DVI and HDMI • New EDID supports 2-ch PCM audio for HDMI • Parameters "1080p50Hz" and "PRIVATEACCESS" added • Parameters for shared access to redundant CPU unit added • EXTIMSD file required for DVI-I CPU units only

Changes HID FW		
2016-02-16	**HIDCPU HIDCON V4.01**	**New Features and Enhancements:** • <Hotkey><R><H><Enter> for hardware reset and <Hotkey><R><S><Enter> for software reset • Port deactivation in Multi-Screen Control (U-Switch) • Support of Logitech K400 keyboard • Support of Logitech MK220 keyboard/mouse • Support of various touch screens for KVM sharing • Expanding of favourites in port mode to 254 • Support of Raspberry Pi • Support of 32 macros in a matrix • Freely configurable Multi-Screen Control (U-Switch) • Support of new X-key generation **Improvements:** • Multi-Screen Control with identical mice • Support of Logitech Unifying Receiver • Key buffer timeout • Wake up of computers from sleep mode • Boot process of U-Switch • Handling of multi interface devices • Acceleration in Multi-Screen-Control • Change of polling interval • Handling of multi-interface keyboards • Control of keyboard LEDs • Fixed assignment of K/M to dedicated hub ports • Support of horizontal scrolling of Apple mice in USB-HID-Ghosting • Secure transmission of data packages • Pointer handling in Red Hat and CentOS • Handling of hubs for 3rd party USB switch • Support of keyboards with mouse interface • Support of EloTouch screens for shared control **Fixed Bugs:** • Switching of U-Switch • Operation of Multi-Screen Control • Port arrangement in Multi-Screen Control (U-Switch) • Deactivation of ports (U-Switch) • Start of recovery console of mac computers

		• Handling of absolute mouse reports • Converter OSD shut down • OSD control in cascaded environment • Mouse handling as a combined device • U-Switch arrangement 2x4 in Multi-Screen Control corrected
2014-06-26	**HIDCPU HIDCON V3.02**	**New Features and Enhancements:** • <Hotkey><d><1> and <Hotkey><d><2> select respective video channel of 482 Dual-Head CPU unit • Support of X-Key Stick (16 keys) to activate macros on the matrix • Support of Yokogawa keyboard • 4x1 vertical mode for Multi-Screen Control **Improvements:** • Remote wake up • Switching of U-Switch • Operation of Multi-Screen Control **Fixed Bugs:** • Reports of USB-HID Ghosting corrected

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Changes Converter FW		
2016-07-14	CONVGPU V1.40	**New Features and Enhancements:** • New resolutions for SDI (1080p@24/25/30Hz) • EDID change via keyboard command (VGA vs. DVI) <Hotkey><V><G> (VGA) or <Hotkey><V><D> (DVI) **Improvements:** • EDID transmission • Scaling **Fixed Bugs:** • RAM timing • Saving of image settings • Minor bug fixes
2014-06-06 2014-03-14 2014-03-14	CONVGPU CONVPGA CONVMSD V1.32	**Improvements:** • Updates for CONVGPU via Draco tera **Fixed Bugs:** • Minor bug fixes