DekTec SDK REVISION HISTORY







DekTec SDK Revision History

SDK version	May2019	
Versions	DTAPI: Drivers: DtapiService:	v5.34.0.120 Dta v4.27.2.258, DtPcie v1.2.0.66 DtaNw v3.5.10.41, Dtu v4.13.4.81 v3.5.2.79
Changes	New features:	PA-2172 Dual ASI/3G-SDI Ports for PCIe pport for constellations en transport stream packets with timestamps pport for Transmit on timestamp DTAPI_TXMODE_TXONTIME MXFrame::m_Video::m_Planes::m_WidthInSymbols did report unscaled width pominal bitrate instead of actual bitrate was reported 39: For some frequency changes a long lock delay occurred 39: Bad packet count was very large after a tune action serted dummy frame in STL3FULL mode were invalid. 175: DtPcie driver did not support Windows standby condition aputChannel GetStatus did not return DTAPI_PCKSIZE_188 GetFlags returned an incorrect latched sync error DTAPI_E_INVALID_LEVEL was reported incorrectly for DTAPI_STAT_RFLVL_CHAN abling SMPTE-352 descriptor insertion did not work DTAPI_E_INVALID_IP_ADDR was reported on broadcast address configuration 95: DtapiVidStd2loStd was missing support for DTAPI_VIDSTD_2160P50B pport for Transparent Packets was missing e video configured for NV12 (=DT_PXFMT_YUV420P2_8B) was corrupted bit SDI file format playout was not received by some receivers PU did require SSE4.1support, now minimum requirement is SSE3.0 AvOutput::GetHdmiStatus could report old values
	• GCC5.1 DTAP	onnection errors did occur after a long time Pl binaries were not correctly build
	Support for DIA-	2172 requires Visual Studio 2013 or higher and the DtPcie driver installed

SDK version	n Feb2019	
Versions	DTAPI: Drivers: DtapiService:	v5.33.0.117 Dta v4.27.1.257, DtPcie v1.1.0.59 DtaNw v3.5.10.41, Dtu v4.13.4.81 v3.5.1.77
Changes	New features: • Support for DTA-2139B Twelve-Channel Cable/Terrestrial Receiver for PCle Bug fixes: • DtapiService crash was seen on older PC's that did not support AVX instruction set • DTA-2131: ATSC stream with long echoes was not received	
	• DTU-315: DT Linux only bug f • DTA-2136 Af	TAPI_E_INVALID_LEVEL was reported when Output Level was configured during playout
	Support for DTA installed	A-2175 and DTA-2139B requires Visual Studio 2013 or higher and the new DtPcie driver



SDK version	n Jan2019		
Versions	DTAPI: v5.32.0.115 Drivers: Dta v4.27.0.256, DtPcie v1.0.9.55 DtaNw v3.5.9.40, Dtu v4.13.3.80 DtapiService: v3.5.0.75		
Changes	New features: Support for DTA-2175 HD-SDI/ASI Input+Output with Relay Bypass for PCIe DTA-2115B/DTU-315: option to (re)set the ATSC 3.0 Time Information DTA-2131: ATSC 3.0 L1B and L1D constellation support DTA-2131: ATSC 3.0 output of raw BB-frames support DTA-2174/79: Quad Link (DTAPI_CAP_QUADLINK) capability to simplify configuration of 4K		
	Bug fixes: • Unexpected DTAPI_NOT_SUPPORTED on SetModControl() was reported • SMPTE-352 descriptor insertion was not disabled when using DtOutputChannel for SDI HD cards • DTU-245: DtInpChannel::Read() junk bytes were seen at start of the buffer • DTU-315: DTAPI_E_INVALID_LEVEL was reported when Output Level was configured during playout • DTU-315: DTAPI_TX_DMA_UFL was sometimes reported for DVB-S2X/ISDB-S3 • DTA-2115B/DTU-315: MISO signal was not correct for ATSC3.0 • DTA-2115B/DTU-315: no error code on SetModPars() containing an ATSC 3.0 PLP collision • DTA-2115B: SFN TOO_LATE error was seen at specific sample rates • DTA-2152: Doubly Buffered configuration did not work • DTA-2182: DtapiService communication error did occur resulting in no license points available • DTA-2195: Line doubling on 4K output was seen for DT_PXFMT_YUV422P_16B		
	Linux only New Features: • GCC4.8 and GCC5.1 DTAPI binaries are now distributed; adding full C++11 support and better support for latest distributions		
	For Linux GCC4.8.5 or higher is required Support for latest boards (DTA-2175/DTA-2139B) requires Visual Studio 2013 or higher and the new DtPcie driver installed		



SDK version July2018		
Versions	DTAPI: Drivers: DtapiService:	v5.31.0.109 Dta v4.26.4.253, DtaNw v3.5.9.40, Dtu v4.13.2.78 v3.4.1.72
Changes	Bug fixes: • DTA-2160: ide Linux only bug fix • DTA-2160/62	TU-315: support for ISDB-S3 modulation released entical multicast reception could fail for IP channel 16 th ses: : DtaNw build error for CentOs 7.5 OB and Visual Studio 2010 support will be discontinued from November 1th 2018

SDK versio	n May2018		
Versions	DTAPI: Drivers: DtapiService:	v5.30.0.108 Dta v4.26.2.251, DtaNw v3.5.7.38, Dtu v4.13.1.77 v3.4.1.71	
Changes	 New features: Added support for DTA-2131 new licenses: XPRT (C2Xpert T2Xpert, Atsc3Xpert support), RXAB (Basic) RXA3 (ATSC 3.0) and RXAT2 (DVB-T2) Matrix API 2.0: Support for getting/setting the AFD (RP186-2008) Matrix API 2.0: AncGetPacket wildcards and selected range of lines parameters added DTA-2115B/DTU-315: Initial support for ISDB-S3 modulation DTA-2131: ATSC 3.0 support for reception of ALP-packets up to 64K byte DTA-2131: ATSC 3.0 support for 2016 and 2018 LMT/RDT ALP encapsulation modes DTA-2195: DtAvOutput supported HDR formats added in DtHdmiTxStatus struct SHA256 driver signing support 		
Matrix API 2.0: Som disruption in the inp Matrix API 2.0: AES DTA-2136: Frequen DTA-2162: Multicas DTA-2162/2160: G DTA-2195: In some DTA-2195: DTAPI_E DTA-2195: HdmiTx Linux only bug fixes:		O: AES validity bit was not ignored like specified when extracting audio as AES3 samples frequency offset to lock was needed when analog channel was active Multicast without source specified was not possible for SSM IP address range 160: GetFifoLoad() could be incorrect for IP playout in some cases 2160P24 displays were not detected DTAPI_E_INVALID_LNKSTD on DtMxProcess::Start for 4K could be seen IdmiTx SCDC initialisation fails sometimes after hot plug detect	
	DTA-2152\74\79\95: DTAPI_E_OUT_OF_MEMORY was seen on ASI playout due to Feb2018 Linux SDK change Visual Studio 2008 and Visual Studio 2010 support will be discontinued from November 1th 2018		



SDK version	n Feb2018	
Versions	DTAPI: Drivers: DtapiService:	v5.29.0.105 Dta v4.26.0.248, DtaNw v3.5.7.38, Dtu v4.13.0.76 v3.4.0.70
Changes	 Matrix API 2.0 DTA-2131: L1 Bug fixes: DTA-2115B: 0 DTA-2131: G DTA-2154: Ro 	rt for DTA-2182 Dual H.264 Encoder D: Support for WSS and Teletext output I-detail version 1 support added for ATSC 3.0 demodulator QAM-B signal was inverted DAM-B bitrate and timestamps were 0 Debustness improvement for possible hang seen on multiple video standard switches Dessible invalid FIFO-load was reported on first call
	Dta and Dtu oDtaNw driver	xes: did generate a lot of DtapiDemoSvc Pipe files in /Tmp folder driver build errors were seen for Fedora 27 (kernel v4.14) build errors were seen for RedHat/CentOs 7.4 1: Kernel page fault was seen for some Linux distributions



SDK version	Nov2017	
Versions	DTAPI: Drivers: DtapiService:	v5.28.0.103 Dta v4.25.0.245, DtaNw v3.5.6.37, Dtu v4.12.1.74 v3.3.5.64
Changes	 Matrix API 2.0 Matrix API 2.0 Matrix API 2.0 bleVpidProcess Window 10 se DTA-2131: Su Bug fixes: DVB-S2 CID G DtInpChannel Matrix API 2.0 Matrix API 2.0 Matrix API 2.0 DTA-107: SetS DTA-2115B: S DTA-2115/DT DTA-2131: AT DTA-2131: AT DTA-2131: AT DTA-2131: Inv DTA-2180: Po 	utput::SetHdmiAudioChannel for DTA-2195 : Support for Line 21 CEA-608 CC output : Support for ancillary data VPID configuration per frame; DtMxAuxConfigSdi::m_Disasing should be set. cure boot driver support report for QAM-B demodulation GUID is now using a default unique value, but could still be overridden ::GetStatistic() did not return errors like DTAPI_E_NOT_SUPPORTED : Pixel format DT_PXFMT_YUV420P2_8B caused a crash or corrupted output : Callback did not return error for 1080i60 configuration but 1080i59 input signal Sur() was failing although a valid CM license was used ipurious in the ATSC 3.0 output was seen TU-315: ATSC 3.0 ALP parsing incorrect when SIF or HEF is used TSC (8-VSB) demodulator did not set TEI bit in case of stream errors TSC (8-VSB) demodulator statistic DTAPI_STAT_BER_PRERS did not return correct value TSC 3.0 demodulator MER was not precise for constellations with an irregular pattern valid ATSC 3.0 ALP-packets when ALP-header contained additional headers valid ATSC 3.0 ALP-packets when ALP-header contained additional headers valid ATSC 3.0 ALP-packets when ALP-header contained additional headers valid ATSC 3.0 ALP-packets was reported

SDK version	on Aug2017	
Versions	DTAPI: Drivers: DtapiService:	v5.27.0.97 Dta v4.24.0.242, DtaNw v3.5.6.37, Dtu v4.12.1.74 v3.3.4.63
Changes	 DTA-2131: A Bug fixes: DTA-2131: N DTA-2195: d DTU-351: W Linux only bug f DTA-2160/6 DTU-315: DN 	Output::SetHdmiColorimetry for DTA-2195 Maximum number of LDPC iterations increased to improve performance NO_SUCH_DEVICE errors were seen in case of enabled "Windows fast startup" driver was not updated when previous version was installed findows dtu driver was failing due to June2017 SDK changes fixes: 2: kernel > 4.11.0 (like Fedora 25) resulted in a DtaNw compile error VB-S(2) playout was failing 15/205/215: Dtu driver used on kernel > 4.8.0 did not start



SDK version June2017		
Versions		v5.26.0.96 Dta v4.23.0.240, DtaNw v3.5.5.36, Dtu v4.12.0.73 v3.3.3.62
Changes	New features: • Support for DTA-2195: 12G SDI input + output with HDMI-2.0 output • DTU-315: Linux support	
	DTAPINET Dtln	Possible crash was seen for 32 bit VS2008 and VS2010 configurations pChannel::SetErrorStatsMode was missing eading issues could occur for calls like SetTunerFrequency(), Tune()

SDK version	n April2017	
Versions	DTAPI: Drivers: DtapiService:	v5.25.0.94 Dta v4.22.0.236, DtaNw v3.5.5.36, Dtu v4.11.0.71 v3.3.3.61
Changes	modulator (D Matrix API 2.0 Matrix API 2.0 Visual Studio DTA-2115B/I DTA-2154/2 DTA-2180: S DTA-2195 12 Bug fixes: Matrix API 2.0 DTA-2160/2 DTA-2160/2 Linux only bug fi Dta driver bu For Fedora 2: Matrix API 2.0 IMPORTANT NO	2: Added function to configure AFD line number 2: Added function for Genlock pixel offset 2017 support added 20TU-315: Support for negative SNR for testing robust ATSC 3.0 and DVB-S2X modes 174: Added DtDevice:SetVcxoState to control the VCXO 20TO upport for Dolby Digital Pro audio encoding; requires firmware v2 20TO-SDI I/O adapter with HDMI 2.0 output: Initial support added 20: for some equipment audio decoding issues occurred 3: for some equipment a



SDK version	Feb2017			
Versions	DTAPI: Drivers: DtapiService:	v5.24.0.91 Dta v4.21.0.229, DtaNw v3.5.4.35, Dtu v4.11.0.71 v3.3.2.60		
Changes	New features:	upport for 8-VSB demodulation upport for QAM-A and QAM-C demodulation oport for DVB-CID modulator issue was seen when using guard interval 12_4864 modulator lock statistic reported in_lock when signal was lost Statistics::GetName function didn't return the string correctly ation did result in high PCR-jitter when PCR was part of the video PID 0: For 4K level B audio data/control packets were not always located in the correct link Continuous Wave configurationdid result in 3dB offset otential DVB-T2 synchronisation issue was seen after cable disconnect-connected 37/2139: Constellation points were not in range of -16k+16k oubly buffered mode was not working for firmware version V3		
	• DTA-2160/21	62: VLAN configuration using SetlpPars was not working SOD was seen in a specific condition on loop-through and multicast IP addresses		
	Linux only bug fixes: • DTA-2160/2162: MAC address changes were not applied correctly			



SDK version	Dec2016	
Versions	DTAPI: Drivers: DtapiService:	v5.23.0.89 Dta v4.20.0.226, DtaNw v3.5.3.34, Dtu v4.10.1.70 v3.3.1.59
Changes	 ATSC 3.0: Sup Matrix API 2.0: Matrix API 2.0: Matrix API 2.0: DTA-2131: Su Bug fixes: VLAN driver wi Matrix API 2.0: DTA-2115B: 8 DTA-2138B: R DTA-2138(B): DTA-2160/21 	anges incorporated for latest specification update sport for IQ over ASI option (DTA-2145 and DTA-2160) Added minimal byte alignment setting (DtMxVideoConfig::m_BufAlignment) Decoding performance improvement by using separate threads for Video and Ance Support for thread priorities (DtMxProcess::SetThreadScheduling()) pport for QAM-A (DVB-C) and QAM-C demodulation as not updated by Installer Embedding an audio service with more than 4 services could cause a crash Channel configurations for ATSC 3.0/DVB-T2/DVB-C2 resulted in inverted spectrum F level accuracy was1dB instead of 0,1dB DTAPI_E_INVALID_SYMRATE was reported when configuring the symbol rate 62: IP output did take broadcast MAC address instead of the default gateway 62: IP-Address in DtHwFuncDesc did return 0.0.0.0 in case of a static defined address ted cable

Versions	DTAPI: Drivers:	v5.21.0.85 Dta v4.19.0.224, DtaNw v3.5.3.34, Dtu v4.10.1.70	
	DtapiService:	v3.3.0.58	
Changes	New features: • Support for DTA-2179: 12xSD/HD/3G-SDI and ASI; maximum performance 8x3G(2x4K) + 4xHD • Matrix API 2.0: Performance improvements including support for thread affinity for call back threads • Matrix API 2.0: Added support for setting VPID bytes (part of DtMxAuxConfigSdi)		
	 Matrix API 2. TPXFMT_L DTA-2174: S 	pration option was missing for Windows 10 D: Crash when receiving SD-SDI, aux data enabled and a non-default pixel format D: AES sample parity was not computed correct for HD streams D: Possible assert when scaling SD-SDI signals D: Incorrect VPID was used for 4K output (3G level B) D: Lines were duplicated for a 4K output using the DT_PXFMT_YUV422P_8B pixel formation D: Columns were swapped on 4K sample-interleave output when configured as IYVY_8B ignal detected but no new frame interrupts after short signal interruption In some rare cases input standard detection on HDMI port was failing	
	Linux only bug f Lock up was	ixes: seen on CentOS 7 HP DL380 G9 server	
	IMPORTANT No Visual Studio 20	OTE: 005 and Windows XP support will be discontinued at the start of 2017	



SDK version	n Aug2016	
Versions	DTAPI: Drivers: DtapiService:	v5.20.0.83 Dta v4.18.0.222, DtaNw v3.5.2.30, Dtu v4.10.1.70 v3.3.0.58
Changes	terleaver (HTI) DTA-2160/21 Matrix API 2.0 ding of AC-3 (Support for DT Bug fixes: Matrix API 2.0 Memory leak (DTU-315: Spe DTA-2136: Sp DTA-2139: DT DTA-2162: BS DTA-2180: Nt Linux only bug fix Driver compile	62: Support for routing tables : Add support for inserting SMPTE-337 data-burst as audio samples (enables embedand E-AC-3 audio) T_EVENT_TYPE_IOCONFIG that fires when any IoConfig on attached device changes : Possible segmentation fault on high load : Output with pixelformat DT_PXFMT_UYVY422_8B causes application crash in driver on each SetIoConfig call (only applies for the Windows driver) sectrum inversion for DVB-C was incorrect inversion measurement was incorrect inversion measurement was incorrect inversion inversion measurement was incorrect inversion inversion measurement was incorrect invers

SDK version	on June2016	
Versions	DTAPI: Drivers: DtapiService:	
Changes	 DTA-2131 A Support for m Support for D Support for D Support for D Support for L Matrix API 2.0 Matrix API 2.1 Matrix API 2.1 Matrix API 2.2 Matrix API 2.1 Matrix API 2.2 Matrix API 2.1 DTAPI namin DTA-2115B: DTA-2115B/1 	eboot without powercycle for the DTA-2154 icense Programming (DtDevice::SetLicenseFromFile, DtDevice::SetLicenseFromString) 0: Performance improvements for 4K 0: Support for teletext decoding from 625I50 signals 0: Support for audio frame number when no audio control packets are available 0: DtMxRawConfigSdi::m_LineAlignment set to -1 (no alignment) did result in data



SDK version April2016		
Versions	DTAPI: Drivers: DtapiService:	v5.18.1.78 Dta v4.16.0.217, DtaNw v3.5.2.30, Dtu v4.9.1.68 v3.2.0.56
Changes	DtapiService: v3.2.0.56 Bug fixes: • DTA-2115B: Power level for 8x8MHz mode was incorrect for DVB-T2 and DVB-C2 • DTA-2131: More improvements for 1.7MHz adjacent channels were needed • DTA-2180: Audio pass through configuration was failing • DTA-2180: Added encoder limitation: max 2 AAC audio channels for 1080p H.264 configurations • DTA-2180: Added encoder limitation: max 3 Dolby-E audio channels are supported and only 2 for all 1080p H.264 configurations	

SDK version March2016		
Versions	DTAPI: Drivers: DtapiService:	v5.18.0.77 Dta v4.16.0.217, DtaNw v3.5.2.30, Dtu v4.9.1.68 v3.2.0.56
Changes	New features: • Support for DTA-2115B 8x 8MHz VHF/UHF channel modulation (HW8CH option) • Support for DTA-2115B GPS clock synchronisation • Support for DTA-2115B Phase noise emulation • Full support for DTA-2180 H.264 HD Contribution Encoder for PCle	
	DTU-315: diaDTU-315/DTDTA-2131: d	Scan returned no NICs when more than 20 NICs were present d not output a signal at low symbol rates A-2111/DTA-2115: power level for Multi-channel modulation (SWMC) was incorrect ifficult to receive a signal when many adjacent channels were present stening on IP-inputs, when no data was received, did cost a lot of CPU resources

SDK version Jan2016		
Versions	DTAPI: Drivers: DtapiService:	v5.17.0.74 Dta v4.15.0.212, DtaNw v3.5.1.29, Dtu v4.9.0.67 v3.1.1.54
Changes	Matrix API 2. DTU-315 du Bug fixes: Matrix API 1. DAB playout GetlpStats m IPv6 receive Possible app DTU-236(A) Linux only bug t DtapiService	rt for DTA-2180 H.264 HD Contribution Encoder for PCle 0: performance improvements for 4K al channel software modulation 0: z-bit in audio samples was set for both channels of a channel resulted in audio artefacts when play DAB ETI file containing audio reconfiguration NumlpPacketsReceived was not incremented when header identification field was zero for UDP resulted in a crash lication hang was seen occasionally due to race condition in DMA abort QAM annex was not reported correctly in StreamXpert fixes: install fix for Ubuntu 14.04 High CPU load seen when controlling multiple units



SDK version	SDK version Oct2015		
Versions	DTAPI: Drivers: DtapiService:	v5.16.2.71 Dta v4.14.7.207, DtaNw v3.5.1.29, Dtu v4.8.3.66 v3.1.0.52	
Changes	Support for lat Bug fixes: DtOutpChannel DtInpChannel Matrix API 2.0 Matrix API 2.0 Matrix API 2.0 DTA-2107: DV	el::SetFailsafeConfig did return invalid value on DTAPI_IOCONFIG_FAILSAFE ::GetStatistics did return unclear error when tuning action was still in progress : Number of dropped frames was not accurately reported for DTU-351 : No error was returned when configuring raw SDI input for multi-link : Out-of-memory issue was seen when call-back on input-only matrix was to slow VB-S2 outputs was failing due to a DTAPI change in Aug2015 SDK	

SDK version Sep2015		
Versions	DTAPI: v5.16.1.68 Drivers: Dta v4.14.6.205, DtaNw v3.5.1.29, Dtu v4.8.2.65 DtapiService: v3.0.4.51	
Changes	Bug fixes: Matrix API 2.0: performance improvements for 4K NV12 input Multiple IP channel detach at the same time could have resulted in a crash DTU-236: DtInpChannel::Equalise disable call did fail DTU-238: ISDB-T statistics BER PRE-RS and PER where invalid DTU-238/DTA-2138B: DVB-C2 relock on input signal stop and start was failing DTU-315: Programing a license file using DtInfo did not succeed DTU-315: Modulator output errors were seen in some cases DTA-2137: Link margin statistic was not calculated correctly DTA-2174: Internal genlocking error, caused 4K output issues	



SDK version	n Aug2015		
Versions	DTAPI: Drivers: DtapiService:	v5.16.0.67 Dta v4.14.4.203, DtaNw v3.5.1.29, Dtu v4.8.0.63 v3.0.3.50	
Changes	New features: • Support for DTU-315 VHF/UHF/L-band modulator for USB-3 • Support for Visual Studio 2015 • Matrix API 2.0: Support for 4:2:0 (NV12 pixel format) • Matrix API 2.0: Support for parsing WSS from 625i signals • Matrix API 2.0: Support for parsing Line21 data from 525i signals • Matrix API 2.0: Support for parsing/generating Video Index data from SD signals		
	Bug fixes: • Matrix API 2.0: performance improvements for 4K input + output (V210) • Matrix API 2.0: performance improvements for DTU-351 • Matrix API 2.0: Assert was seen for DTU-351 used in debug mode • Matrix API 2.0: SD audio parsing was resulting in a crash • Matrix API 2.0: callback was not called (with DT_FRMSTATUS_NO_SIGNAL) when there was no input present on startup • DTU-236/238: SpectrumScan was failing when start frequency was near the minimum frequency • DTU-236/238: SpectrumScan improvements for duration • DTU-351: DtDevice::DetectVidStd was not implemented • DTA-2131: RfLevel measurement was incorrect caused by latest DtapiService changes • DTA-2135: in some cases DtapiService crash was seen using T2Xpert • DTA-2138B: RfLevel was having an incorrect offset • DTA-160/2160: SDI over IP transmit was not working • DTA-2162: for Source Specific Multicast only IP address was configurable not the Port number • DTA-2152/2154/2174: Genref port was not configurable when a port has genlock=on configured • DTA-2152/2154/2174: driver was failing when configuration in the registry was invalid		
	Linux only bug f DtaNw driver DtapiService DtapiService	Senlock was not calibrated (a few lines offset) ixes: did not build on Linux kernels >= 3.16 did not install/start correctly on Ubuntu 15.04 was hanging when DtInpChannel:Detach() was called failure was seen when using old SDK and new drivers	



SDK version	1 June2015	
Versions	DTAPI: Drivers: DtapiService:	v5.15.0.60 Dta v4.14.0.194, DtaNw v3.5.0.28, Dtu v4.7.0.61 v3.0.1.46
Changes	DTU-351 sup Added DtDev Added DtDev Added DtDev Bug fixes: Documentatio DtInputChanr DtDemodEver Matrix API 2.0 DtSdiUtlity Ta DTU-236A di DTU-238 did DTA-2131: cc DTA-2154/Di	G level B. NOTE: requires DTA-2174 firmware version 3. port for Linux ice::DetectVidStd() capable of detecting 4K video standards and link number ice::GetTemperature(), DtDevice::GetFanTemperature() is now deprecated on for DtInputChannel::GetConstellationPoints() points ranges were incorrect. inel::SpectrumScan() for DTU-236A/DTU-238 was not working properly int DTAPI_EV_TUNE_FREQ_HAS_CHANGED was not triggered in some conditions ib: Possible corrupted audio was seen for SD signals ib: Wrong audio status bits for DtMxAudioChannelStatus:: GetPcmNumBits() ib: Invalid BCH was inserted for HD audio packets ib: Possible crash when DtMxRowConfig::m_Enable was set to false ble Of Contents size was too small id report incorrect levels in some cases fail to lock in certain situations infiguring more than two DTA-2131 units in one PC did result in an error TA-2174: PSF input formats were not detected TA-2154/DTA-2174: No data was received after some fast input switch conditions

SDK version May2015		
Versions	DTAPI: Drivers: DtapiService:	v5.14.0.56 Dta v4.13.3.191, DtaNw v3.5.0.28, Dtu v4.6.1.59 v3.0.0.44
Changes	DtInpChanne Bug fixes: DTA-2115: c continuity in DTA-2137: f DTA-2154: c	biService uses statistic caching to significantly improving speed of demodulator related el methods (e.g. GetStatistics or SetTunerFrequency) brossing the 999↔1000Mhz and 1399↔1400Mhz frequency boundaries caused a dis-



SDK version	n Apr2015	
Versions	DTAPI: Drivers: DtapiService:	v5.13.0.54 Dta v4.13.0.180, DtaNw v3.5.0.28, Dtu v4.5.1.57 v2.2.15.39
Changes	DTA-2162 • Full support for Support for ISI • Matrix API 2.0 • DTA-2111: D' • DTA-2111: D' • DTA-2115: University of the properties of the proper	InpChannel::ReadFrame call was broken

SDK version Feb2015r2	
Versions	DTAPI: v5.12.0.51 Drivers: Dta v4.12.1.168, DtaNw v3.5.0.28, Dtu v4.5.0.56 DtapiService: v2.2.15.39
Changes	 Hot Fixes: DTA-2154 Rev 4: Fine-tuned FAN control settings to make sure FAN does not run faster than necessary for lower temperatures DTA-160/2160/2162: FEC reconstruction logic did not restore all packets it could potentially repair



SDK version	SDK version Feb2015	
Versions	DTAPI: v5.12.0.51 Drivers: Dta v4.12.0.165, DtaNw v3.5.0.28, Dtu v4.5.0.56 DtapiService: v2.2.15.39	
Changes	 New features: Support for dual channel software modulation; new license available for DTA-2111/DTA-2115 Support for HD-SDI Progressive Segmented Frame (PSF) formats. NOTE: requires latest firmware versions for DTA-2152 (V2) and DTA-2154 (V5) Matrix API 2.0: RGB support Support for DTA-2154 hardware revision 4.0 GENREF IO-config no longer takes a reference video standard as par-extra0 Matrix API 2.0: added a frame arrival timestamp to DtMxFrame Support for DTA-2152 firmware version 2 and DTA-2154 firmware versions 4/5 	
	 Bug fixes: Possible crash on older CPU's (that did not support SSE3) LocalNIC 127.0.0.1 loopback did not work when IP cable was disconnected Matrix API 2.0: The 3G-outputs in a 4K matrix row were not always in-sync with each other Matrix API 2.0: Possible corruption of received ancillary data for 3G-SDI signals Matrix API 2.0: Checksum was missing on DtMxFrame::AncGetPacket Matrix API 2.0: Improved performance of ancillary data generation Matrix API 2.0: Improved performance of ancillary data generation Matrix API 2.0: DtMxFrame::AncGetPacket failed for audio ancillary data DtFrameBuffer::AncAddAudio/AncCommit was significantly slower for fractional SDI standards DTAPI.NET was missing previous DTAPI changes, like DVB-S2x and DtDvbCidPars 204 bytes DVB-S modulation resulted in incorrect TS-rate DTA-2107: 204 bytes playout was failing (remark: TxMode MIN16 is required) DTA-2115: DVB-S2X errors were generated for VCM stream with VLSNR and other modcods DTA-2139: QAM-B tuning was sometimes failing for some high frequency signals DTA-2152: Fixed genlock alignment, to ensure outputs are aligned within 1.5us of the genlock reference 	
	Windows only bug fixes: On Windows XP, the DTAPI would crash (introduced in Nov2014 SDK release) Memory usage was increasing slowly on multiple AttachToPort/DetachToPort actions	
	Linux only bug fixes: • All threads in an application linking to the DTAPI were renamed "MX log thread"	



SDK version Nov2014	
Versions	DTAPI: v5.11.0.49 Drivers: Dta v4.11.0.148, DtaNw v3.5.0.28, Dtu v4.4.16.55 DtapiService: v2.2.14.38
Changes	 New features: Support for the DTA-2174 (Quad 3G/HD-SDI / ASI Ports with Genlock Adapter) DTAPI- Matrix 2.0: Matrix API 2.0 further abstracts from SDI interface implementation details and enables your application to concentrate solely on processing the video, audio and ancillary data. For example it can be used to easily build SMPTE-425-5 compliant 4K input/output applications using the DTA-2174. DTA-2115: Support for DVB carrier identification for satellite using DtOutpChannel::SetModControl(DtDvbCidPars)
	Bug fixes: Local NIC did not report errors like DTAPI_NO_LINK DTAPINET was missing new SMPTE ST 2022-7 functions DTAPI_RXMODE_IPRAW was failing for non MPEG 192 bytes packets DtInpChannel::RegisterDemodCallback in some cases failed for slow PC's Constant audible crack when embedding audio into a XXXp59.94 SDI standard DTA-160: Windows Sleep/Hibernate for some PC's resulted in a BSOD DTA-2115: DVB-S2X modulation for 32-APSK 32/45 short frames was incorrect DTA-2115: DVB-S2X modulation for VLSNR BPSK was incorrect DTA-2131: DtAdvDemod MER and Impulse Response was incorrect for second MISO channel DTA-2131: DVB-C2 demodulator tuning to signal with 32MHz was failing DTA-2131: DVB-C2 reception of a G/I=128 configuration was not error free

SDK version	SDK version Oct2014	
Versions	DTAPI: v5.10.0.46 Drivers: Dta v4.10.0.144, DtaNw v3.5.0.28, Dtu v4.4.16.55 DtapiService: v2.2.13.37	
Changes	New features: • Support for SMPTE ST 2022-7 'Seamless Protection Switching' using the DTA-2162 • Support for all possible number of FEC rows and FEC columns (before only the SMPTE specified) • Support for block aligned FEC generation using DTAPI_FEC_2D_M1_B and DTAPI_FEC_2D_M2_B • DTA-2138B support; upgraded demodulator includes ISDB-T and T2 lite (DVB-T2 v1.3.1) support • DTA-2144B support	
	Bug fixes: • Fractional SDI video standards did not contain the correct amount of audio samples in their output • DTA-2137: Calling SetTunerFrequency() twice on same frequency in some cases stopped the receiver • DTA-2115: DVB-S2X performance issue was seen on some new PC's Linux only bug fixes: • DTA-2154: Possible driver crash on application exit • DTA-2160: Possible failing network port attach for Ubuntu 3.11	



SDK version Sep2014	
Versions	DTAPI: v5.9.0.45 Drivers: Dta v4.9.1.142, DtaNw v3.5.0.28, Dtu v4.4.15.54 DtapiService: v2.2.12.36
Changes	New features: Support for 20%, 25% roll-off for DVB-S modulation DTA-2131: DAB Transmitter ID support AncPacket class extended with m_LineNumber field Note: Line parameter removed from DtFrameBuffer::AncAddPacket old interface of AncAddPacket is marked as deprecated and will be removed in a future release Bug fixes: Dta crash could occur on application exit T2-MI input stream was not correctly modulated when IL-Type = 1 T2-MI output through a virtual port was not working for DTA-2111 and DTU-215 Registration for DT_EVENT_TYPE_GENLOCK did trigger an assert DtAdvDemod: For DVB-C2 all opened streams were closed on SetTunerFrequency() DtAdvDemod: Virtual input support did not work correctly DtAdvDemod: Did return DTAPI_OK on AttachToPort() when port was already in use DTU-351: Calling DtFrameBuffer::AncGet* twice with the same frame number caused an DTAPI error DTA-2115: DVB-T2 single PLP was not working without DVB-T2 (multiPLP) license DTA-2152: Genlock was misaligned for several formats (720p50 does still have misalignment) DTA-2154: Configuring port 4 as double-buffered from port 3 was no possible DTA-160/2160: A zero in a multicast address was treated as a wildcard Linux only bug fixes:
	IP V6 support was not working correctly



SDK version June2014	
Versions	DTAPI: v5.8.0.43 Drivers: Dta v4.9.0.140, DtaNw v3.5.0.28, Dtu v4.4.14.53 DtapiService: v2.2.12.36
Changes	 New features: Initial support for the DTA-2174 (Quad 3G/HD-SDI / ASI Ports with Genlock Adapter) Support for runtime changes to channel modelling settings (i.e. no need to stop modulation anymore) Support for extra option to force link IP speed to 1Gbps Support for DVB-S2 16/32-APSK constellation shape configuration DTA-2115: Optimized DMA performance, so that card can be used in PCle gen2 slots at maximum sample rates DTA-2154: Reduced time needed to achieve genlock DTA-2154: Support for ancillary data checksum inserter
	Bug fixes: HyperV installation did result in a DTAPI_E_NW_DRIVER error for DTA-160/2160/2162 Spectral inversion was enabled by default for DVB-S2 / ISDB-S (introduced in Apr2014 SDK)) VLAN for Windows 8.1 did not function correctly due to administrator right changes Audio control packets were not added for embedded audio in HD SDI streams DTA-2115: Shoulder attenuation was not according specification for OFDM signals DTA-2115: Non-default bitrates for ISDB-T were not accepted DTA-2115: DVB-S2X dummy frames were incorrect DTA-2115: DVB-S2X 16-APSK-L:5/9,8/15,1/2 did not create a correct signal DTA-2144: Driver did crash after driver/PC restart when a genref was configured DTA-2154: GetStatus(AsiLock) did always return 0
	 Non-backwards compatible API change (<u>a code change might be required!</u>): Buffers used for DtFrameBuffer and DtSdiMatrix must now have their addresses aligned at a 32-byte boundary (instead of 8-byte boundary) and their sizes must be a multiple of 32 bytes (instead of 8 bytes). DTE-3137: RF level statistic was incorrectly using dBm unit, now using dBmV. Also statistic for MER was incorrect. Spectral Inversion, Link Margin, Es/NO and Eb/NO statistics are added (similar statistic support like DTA-2137)
	 Linux only bug fixes: Dta driver did not compile for Linux kernel versions >= 3.13 DTA-2160 network port did not function for a network configurations were only 2 interfaces descriptions were found



SDK version Apr2014	
Versions	DTAPI: v5.7.0.41 Drivers: Dta v4.8.0.121, DtaNw v3.4.6.27, Dtu v4.4.13.52 DtapiService: v2.2.11.35
Changes	New features: • Support for DTA-2115 (All-Standard, All-Band Modulator) including DVB-S2x modulation • SDK support for Visual Studio 2013 (VC12) • Support for non-exclusive attaching to input channels, to allow read-only access to port status parameters. NOTE: this is not supported for all input types • Support for DTAPI_STAT_SPECTRUMINV statistic for DTA-2136 Bug fixes: • In some cases invalid DVB-T2 GSE packets were sent • Matrix API did not embed audio ANC packets in switching lines • DtInpChannel::SetIpPars crashed when unicast addresses were specified in combination with seamless protection mode • DTA-2152/2154: Driver did crash when IO Standard for GenRef port was set to SD-SDI • DTA-2152: On high network transmit load the non real-time transmit stalled
	Linux only bug fixes: • DTA-2154 ASI input did not work • DtapiGetDeviceDriverVersion(DTU) did return DTAPI_OK when no DTUs were present

SDK version Feb2014	
Versions	DTAPI: v5.6.0.40 Drivers: Dta v4.7.4.107, DtaNw v3.4.5.26, Dtu v4.4.11.50 DtapiService: v2.2.10.34
Changes	New features: DTA-2131: added Advanced demodulation API support for DVB-T2/DVB-C2 BBframes DTA-2131: added Advanced demodulation API support for GSE using DVB-T2 GSE support added for DVB-T2 modulation ISDB-Tmm support added for DTA-115,116, DTU-215 (only < 13 segments, DTA-2111 can do all) Matrix API support for 24 and 32 bit PCM SDI audio added Matrix API support for timestamps in DtFrameBuffer::GetFrameInfo added Device temperature and fan-speed support added in DtDevice for DTA-2139, DTA-2154 Now making use of Visual Studio generated _WIN64 and _WIN32 defines for DTAPI.H Bug fixes: For Windows 8.1 adding a VLAN did not succeed DVB-T/H was not correctly modulated/demodulated when using 2k in-depth interleaving DtapDeviceScan order of devices returned was changed in Oct2013 release, changes reverted and optional parameter added for serial number sorting DTU-351: SD SDI reception did result in lost frames DTA-2131: Possible crash on detach of DVB-C2/T2 demodulator; introduced in Dec2013 release DTA-2136: Packet loss on Port 2 when tuning port 1 and shared antenna mode was active DTA-2137: VCM lock issue on low SNR; mute mechanism introduced using DtDemodParsDvbS2Adv DTA-2154: Auto detect failed to detect standard of HD signals when port was configured for SD-SDI operation New Linux features:
	Added ini file mechanism which specifies the default IO-configuration values for a card