DekTec SDK REVISION HISTORY







DekTec SDK Revision History

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 la Bug fixes: DtOutpChanne DtInpChanne Matrix API 2.0 Matrix API 2.0 Matrix API 2.0 Matrix API 2.0 DTU-238/DT DTA-2107: D	ew DVB-C2 statistics for DTU-238 and DTA-2138(B) test DTU-238 hardware revision 1 nel::SetFailsafeConfig did return invalid value on DTAPI_IOCONFIG_FAILSAFE l::GetStatistics did return unclear error when tuning action was still in progress D: Number of dropped frames was not accurately reported for DTU-351 D: No error was returned when configuring raw SDI input for multi-link D: Out-of-memory issue was seen when call-back on input-only matrix was to slow A-2138B: DVB-C2 relock on input signal stop and start was failing VB-S2 outputs was failing due to a DTAPI change in Aug2015 SDK rmware upgrade was failing for latest DtInfo version

SDK version Sep2015		
Versions	DTAPI: Drivers: DtapiService:	v5.16.1.68 Dta v4.14.6.205, DtaNw v3.5.1.29, Dtu v4.8.2.65 v3.0.4.51
Changes	 Multiple IP chai DTU-236: Dtln DTU-238: ISDE DTU-238/DTA: DTU-315: Prog DTU-315: Moc DTA-2137: Lin 	performance improvements for 4K NV12 input nnel detach at the same time could have resulted in a crash spChannel::Equalise disable call did fail B-T statistics BER PRE-RS and PER where invalid -2138B: DVB-C2 relock on input signal stop and start was failing graming a license file using DtInfo did not succeed dulator output errors were seen in some cases k margin statistic was not calculated correctly ernal genlocking error, caused 4K output issues



SDK versio	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	 Support for Vi Matrix API 2.0 Matrix API 2.0 Matrix API 2.0 Matrix API 2.0 	TU-315 VHF/UHF/L-band modulator for USB-3 sual Studio 2015 : Support for 4:2:0 (NV12 pixel format) : Support for parsing WSS from 625i signals : Support for parsing Line21 data from 525i signals : Support for parsing/generating Video Index data from SD signals
	 Matrix API 2.0 present on sta DTU-236/238 DTU-236/238 DTU-351: DtD DTA-2131: Rf DTA-2135: in DTA-2138B: R DTA-160/216 DTA-2162: fo DTA-2152/21 DTA-2152/21 	8: SpectrumScan was failing when start frequency was near the minimum frequency 8: SpectrumScan improvements for duration Device::DetectVidStd was not implemented Level measurement was incorrect caused by latest DtapiService changes some cases DtapiService crash was seen using T2Xpert 8fLevel was having an incorrect offset 10: SDI over IP transmit was not working 17: Source Specific Multicast only IP address was configurable not the Port number 17: 54/2174: Genref port was not configurable when a port has genlock=on configured 18: SpectrumScan was failing when configuration in the registry was invalid
	Linux only bug fix • DtaNw driver • DtapiService d • DtapiService v	enlock was not calibrated (a few lines offset) kes: did not build on Linux kernels >= 3.16 lid not install/start correctly on Ubuntu 15.04 vas hanging when DtInpChannel:Detach() was called ailure was seen when using old SDK and new drivers



SDK version 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	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
	 DtInputChanr DtDemodEver Matrix API 2.0 Matrix API 2.0 Matrix API 2.0 Matrix API 2.0 DtSdiUtlity Ta DTU-236A did DTU-238 did DTA-2131: co DTA-2154/D 	on for DtInputChannel::GetConstellationPoints() points ranges were incorrect. nel::SpectrumScan() for DTU-236A/DTU-238 was not working properly nt DTAPI_EV_TUNE_FREQ_HAS_CHANGED was not triggered in some conditions 0: Possible corrupted audio was seen for SD signals 0: Wrong audio status bits for DtMxAudioChannelStatus:: GetPcmNumBits() 0: Invalid BCH was inserted for HD audio packets 0: Possible crash when DtMxRowConfig::m_Enable was set to false ble Of Contents size was too small d report incorrect levels in some cases fail to lock in certain situations onfiguring 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	New features: • Support for the DTU-238 • New V3 DtapiService uses statistic caching to significantly improving speed of demodulator related DtInpChannel methods (e.g. GetStatistics or SetTunerFrequency) Bug fixes: • DTA-2115: crossing the 999↔1000Mhz and 1399↔1400Mhz frequency boundaries caused a dis-	
	continuity in th	



SDK version 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: DI • DTA-2111: DI • DTA-2115: Usi Usindows only bu • DTAPINET: Dt Linux only bug fix • Enumerating of • Makefile orde	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 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: Assert was seen when starting SDI output as 1080i59.94 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-2131: DtAdvDemod MER and Impulse Response was incorrect for second MISO channel 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	

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-2115: DVB-S, DVB-S2 and QAM levels were not correct • 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 (a code change might be required!): 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 versio	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-2154: Analog genlock did not work DTA-2162: 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	n 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



SDK version	SDK version Dec2013	
Versions	DTAPI: v5.5.0.38 Drivers: Dta v4.7.1.104, DtaNw v3.4.3.24, Dtu v4.4.7.46 DtapiService: v2.2.9.33	
Changes	New features: • DTU-236: Added support for GetTunerFrequency() and GetDemodControl() • DTA-160/2160/2162: Support for specifying the source port for IP transmission • DTA-2131: Support for new statistic DTAPI_STAT_FER_POSTBCH Bug fixes: • QAM-B modulation produced inverted spectrum when channel modelling was enabled • DTU-351: Frames were dropped on high CPU load • DTU-351: Some PC's did have incidentally a frame drop • DTA-2131: BER_PRELDPC and PER DVB-T2 statistics were not valid after DTAPI_STAT_LDPC_STATS call • DTA-2131: DtAdvDemod port attach was failing introduced in SDK Oct2013	
	 DTA-2137: Re-attach could have failed with error DTAPI_E_INVALID_FREQ DTA-2154: Dta driver did sometimes crash on RS422 simultaneously read/write DTA-2154: Switching from fractional SDI standard to ASI resulted in an incorrect ASI stream Linux only bug fixes: Dta driver did not build for 32 bit linux, introduced by SDK Nov2013 changes DtapiService could have crashed when long filenames processes were running DTU-236A: driver communication could have failed during initialization 	

SDK version	SDK version Nov2013	
Versions	DTAPI: v5.4.0.36 Drivers: Dta v4.7.0.102, DtaNw v3.4.2.21, Dtu v4.4.3.41 DtapiService: v2.2.8.31	
Changes	New features: • DTA-2154 official release including RS422 support • DTA-2131: Support for demodulation of complete DAB ETI using DtDabEtiStreamSelPars • DTAPI_STAT_DVBT2_L1DATA statistic extended with extra fields	
	Bug fixes: Possible not supported error when SetloConfig() was called on DtInputChannel/DtOutputChannel DtaNw network driver was stalling when network stack was too busy Dta driver crash could have incidentally happen at startup up due to I2C register remap DtInpChannel::SetRxMode() for IPRAW and STTRP was not working since Aug2013 release DTU-351: FrmBufInputChannel::GetStatus() ClkDet return parameter was always -1 DTA-107: For some PC's DVB-S2 playout was failing in combination with DTA-2111 boards DTA-2138: DVB-T2 L1 data modulation type was incorrectly set DTA-2154: Invalid eeprom content could result in crash DTA-2154: The reported ASI input rate was incorrect DTA-2154: ASI read with NumBytesToRead not a multiple of 32 was failing DTA-2154: ASI fifo was not cleared when going from RCV to IDLE and back DTA-2154: The reported TS-rate for ASI input was not corrected to 188 bytes for 204 bytes packets DTA-2154: Port was not (re-)configured when switching between ASI and SDI	



SDK versio	SDK version Oct2013	
Versions	DTAPI: v5.3.0.35 Drivers: Dta v4.6.0.92, DtaNw v3.4.1.18, Dtu v4.4.2.40 DtapiService: v2.2.7.30	
Changes	New features: • DTU-351 official release • DTA-2154 initial support Bug fixes: • GetTsRateBps() was incorrect for RxMode STRAW • SetRxMode did not return an error when DTAPI_TXMODE_SDI_16B was not supported • Application restart could fail after application exception situation • Data playout could fail after unclean stop and restart of application • Multicast list was not updated correctly when configuring multiple VLAN's • SDI reception of Huffman compressed active video was not working • SDI DtOutpChannel:Write() could fail for specific frame-alignment • Matrix API audio samples alignment issue for fractional video standards • DTU-236: QAM tuner initialization was not completely correct • DTU-236: limit of tuning frequency is 885MHz not 865MHz • DTA-2131: PCR jitter for ISDB-T demodulation could be out of spec	
	 DTA-2131: ISDB-T emergency flag was not set correctly for IIP and dummy byte DTA-2131: Transport Error Indicator (TEI) flag was not set (not supported for T2/C2 HEM mode) DTA-2152: Reading 8-bit SDI data was not done correctly Linux only bug fixes: 	
	DtapiService did not start automatically after unclean stop of DtapiService	



SDK version Aug2013	
Versions	DTAPI: v5.2.4.31 Drivers: Dta v4.5.2.46, DtaNw v3.4.0.17, Dtu v4.4.0.38 DtapiService: v2.2.6.29
Changes	New features: • VLAN support using manually installation of protocol driver DtaNwAp • DTU-351 USB-3 HD-SDI input initial support • Support for ISDB-Tmm modulation using DtMplpOutpChannel::SetModControl(DtlsdbTmmPars&) • DTA-2162 does now have port id included in device description strings • DVB-T demodulation statistic DTAPI_STAT_TPS_INFO including DVB-T Cell-ID information • The number of DtDevice/DtChannel instances is no longer limited to 256
	Bug fixes: • DtDevice::GeTGenlockState was missing since DTAPI v4.0 release • Added private copy constructors to DTAPI classes to make sure that a copy will result in compile errors • DtInpChannel::GetIpStat documentation updated; values are not reset after read • DtInpChannel::GetTunerFrequency returned DTAPI_E_NOT_SUPPORTED • DtaNw Promiscuous mode was not working • DtIsdbtPars::RetrievesParsFromTs did not support 1- and 3-segments audio streams • Certain T2-MI streams did not playout • DTA-124: Crash could occur on 64 bit OS • DTA-2111/DTU-215: MER was lower for DVB-C when Channel Simulator was disabled • DTA-2137: DVB-S2 L3 input selection caused a long delay • DTA-2137: DVB-S2 Multi Input Streams did not always lock (due to invalid ModType) • DTA-2142: Calling DtOutpChannel::SetTstRateRatio was failing • DTA-2152: Unsupported mode DTAP_RXMODE_SDI_ACTVID could be configured • DTA-2152: Reading 8-bit SDI data could cause the DtInpChannel::ReadFrame to hang • DTA-2160: DTAPI_E_OUT_OF_RESOURCES did sometimes occur after a lot of application restarts Linux only bug fixes: • Dta driver did not compile on 64-bit CentOS 5

SDK versio	on June2013
Versions	DTAPI: v5.2.3.29 Drivers: Dta v4.5.1.44, DtaNw v3.3.0.15, Dtu v4.3.1.37 DtapiService: v2.2.5.27
Changes	New features: • Windows SDK is now distributed using an installer containing all drivers, libraries and include files Bug fixes: • DTE board could be reported twice when using multiple network cards and retrieving the available ports • DTE board was not reported when retrieving the available ports and user has no administrator rights • DTAPI documentation was incomplete for SetloConfig, DtStatitics and DVB-C QAM-128 limitation for DTA-2136 and DTA-2139 • DTAPI E DRIVER INCOMP was not returned on Attach when an incompatible driver was installed • DTAPI E NOLINK was not returned when no network connection was available • Visual Studio Express was not able to link DTAPI caused by an ATL dependency • Division by zero exception was thrown when using Huffman compression • DTA-2131: For ISDB-T demodulation a relock was not automatically re-acquired • DTA-2131: Retrieving the RF level statistic resulted in an error • DTA-2139: MER/SNR statistics were incorrectly calculated Linux only bug fixes:
	Dta driver could crash when aborting the application



SDK version	SDK version May2013		
Versions	DTAPI: v5.2.2.26 Drivers: Dta v4.5.0.43, DtaNw v3.3.0.15, Dtu v4.3.0.36 DtapiService: v2.2.4.26		
Changes	 New features: Support for DTA-2162 Support for L3 input for DVB-S2 modulation Support for DAB+/ T-DMB software demodulation Support for ISDB-T software demodulation of all layers using TMCC Support for extra Error statistics for DVB-T and ISDB-T software demodulation Support for new DTA-2137 statistics: Link Margin, Es/N0, Eb/N0, Pre-LDBC BER, Occupied bandwidth and Roll-off factor DTU-236A: Support for individually tuning of both tuners 		
	Non-backwards compatible API change (a code change might be required!) • Statistics like SNR, MER and RF LVL that did support double and integer values now only support integer values		
	 Bug fixes: DtaNw driver installation was not executed when network port was active Dta driver could hang during shutdown or disable Unicast IP receive address in March release did only accept 0.0.0.0 and did not accept IP address of adapter DtInpChannel:ReadFrame blocked on SDI frame when no valid input signal was attached AdvDemod constellation points data stopped in case of a unlock-lock scenario Driver did not check if firmware reboot was allowed Visual Studio 2005 projects could fail building because of missing ATL reference DTE license file programming failed since SDK version Mar2013 DTA-2136 and DTA-2139: Sometimes a value of -1 was returned for SNR DTA-2136: MER/SNR statistics were incorrectly calculated DTA-2137: 32-APSK performance was decreased since SDK version Aug2012 DTA-2152: Video standard capabilities were not set for port 3 (GENLOCK reference port) Linux only bug fixes: DtapiService installation did not work for CentOS 6.3/6.4 		



SDK version	ı Mar2013
Versions	DTAPI: v5.2.1.24 Drivers: Dta v4.4.0.37, DtaNw v3.2.1.14, Dtu v4.2.3.35 DtapiService: v2.2.2.25
Changes	New features: Support for DtTsIpPars Differentiated Services field (formerly Type Of Service) in the IP v4 header or Traffic Class field in the IP v6 header Support for DTE-3120 polarity control Support for DTE-3100 transmit on timestamp mode
	Bug fixes: Some DVB-T2 modulation settings did not run on a Core Duo anymore (CPU load to high) DTE attach speed was slow IP packets were in some cases discarded because the packets were incorrectly recognized as VLAN packets DVB-T2 modulator was not ignoring the IN_BAND_B_FLAG for DVB-T2 version V.1.1.1 SetTxControl was failing when using QAM-B and channel modeling FrmBufInpChannel:SetRxControl call could have resulted in deadlock Source Specific Multicast was limited to the IANA's SSM range for DTA-(2)160 Added missing DtInpChannel ISDB-T and T2MI functions in DTAPI core documentation Uncorrected blocks was not reset between calls to GetStatistics() using DTAPI_STAT_BADPCKCN for DTA-2136 and DTA-2139 DTU-234: For some firmware versions a signal lock problem did occur DTU-234: Added missing statistics DTAPI_STAT_BER_PREVIT, DTAPI_STAT_BER_POSTVIT, DTAPI_STAT_BER_PRERS DTA-2131: Support for missing Rx modes: DTAPI_RXMODE_STMP2, DTAPI_RXMODE_STRAW, DTAPI_RXMODE_STTRP, DTAPI_RXMODE_IMESTAMP32 DTA-2131: DTAPI_FULL_RESET resulted in no data received anymore DTA-2131: DVB-T SetDemodControl failed in some cases DTA-2131: DVB-T bandwidth 5MHz was not supported DTA-2137: Transport Error Indicator (TEI) bit was not set on packets with uncorrectable errors DTA-2138: DtInpChannel:Tune() returned timeout error when there was no input signal DTE-3114: Device was not found on DtapiDeviceScan
	Linux only bug fixes: • DtaNw driver is now installed and loaded automatically • DTU-236: RF level readings were unstable



SDK version	on Feb2013
Versions	DTAPI: v5.2.0.21 Drivers: Dta v4.3.0.35, DtaNw v3.2.0.13, Dtu v4.2.2.34 DtapiService: v2.2.1.22
Changes	 New features: Advanced Demodulator API: support for DVB-T,-T2,-C2 and ISDB-T including measurements Please refer to DTAPI Manual and DTAPI Reference – Advanced Demodulator API documentation Changed Modulation capabilities and new Receiver capabilities and licenses: RXA (Advanced Demodulator), IQ, T2MI and GOLD RX Please refer to DTAPI 5.2 Releases Notes explaining how to adapt your application for these changes. Support for ATSC-MH modulation SDK support for Visual Studio 2012 (VC11) DtDvbT2Pars::RetrieveT2miRateFromTs calculates required TS rate for a given buffer with T2MI data New Statistics BER_PREBCH and BER_PRELDPC, renamed BER_BCH and BER_LDPC to BER_POSTBCH and BER_POSTLDPC DTA-160/2160: support for IPv6 Support for DAB modulation
	Bug fixes: IP header identification field value was not incremented for IP outputs DVB-C2 modulator inserted invalid ISSY in case of HEM and NPD=1 Invalid DVB-C2 signal when using ACM + plp_header_counter=1 + odd number of XFEC-frames DVB-T2-MI FEF sub-part not correctly encoded Possible error when calling DtOutpChannel::GetFlags before DtOutpChannel:SetTxControl SetIoConfig was not thread safe GetFifoLoad returned wrong value for DVB-S2 when symbol rate was changed DtapiDeviceScan returned DTE device's that were not in DTAPI mode DtapiService crash when using incompatible driver DTAPINET DtapiDtDeviceDesc2String() returned incorrect string DTAPINET added missing functions: DtapiModPars2Bandwidth(), DtapiModPars2SymRate() and Dtapi-ModPars2TsRate() DtlnpChannel::GetTsRateBps() doesn't normalize rate to 188byte packets Reading data from USB device failed after warm reboot DTA-107 produced incorrect SNR level for DVB-S2 DTU-215: boot time was slow DTU-236: RF level was always returning around 396 DTU-245: port 2 could not be set in loop-through mode DTA-2137: Not all BER statistics were correct DTA-2137: Not all BER statistics were correct DTA-2137: FEC lock statistic was incorrect DTA-2137: Field length error on 525i59.94 signal DTE-3120: Cannot attach to the DTE in DTAPI mode Linux only bug fixes: Compile warnings for DTA/DTU drivers Otup Symlink was not created for some Linux distributions
	 Dtu driver failed on udev version before v98 Possible system freeze when using IP port on CentOS 5.8 On 64-bit linux not all license were recognized DtapiService installer didn't work when /tmp was not executable IP multicast receive only worked for 1 multicast address(-range) Driver hangs on unloading driver (Red hat 5.4) DTA-2131: AttachToPort was failing



SDK version	SDK version Dec2012	
Versions	DTAPI: v5.1.0.19 Drivers: Dta v4.2.0.33, DtaNw v3.1.0.12, Dtu v4.2.0.30 DtapiService: v2.2.0.18	
Changes	New features: • DTU-236: Support for enabling/disabling equalizer • DTA-2137: removed Frameld from L3 header (firmware V7) • Added support for subtype field in DtDeviceDesc Bug fixes:	
	 DTAPI_TX_CPU_UFL reported but should be DTAPI_TX_DMA_UFL IPAT was very large for RTP stream including FEC and lost packets Local NIC: the data was corrupted every time the RTP sequence number wraps Linker warnings regarding missing .pdb files when linking to DTAPI debug version DVB-C2 modulation: stopped when type 1 and type 2 data slices are mixed DVB-C2 modulation: crashed when header_counter=1 and modulation <= 64qam DVB-C2 modulation: the order of the ISSY fields generated for the first frame was not correct DtFrameBuffer::AncAddPacket returns DTAPI_OK but AncCommit did not add the packet to the output DtFrameBuffer::AncGetPackets never returns DTAPI_E_BUF_TOO_SMALL DtInpChannel::GetStatus incorrectly reported -1 for AsiLock parameter DtInpChannel::RegisterDemodCallback: possible fail on tuner event-register DtInpChannel::SetDemodControl did not accept -1 for ParXtra1 for QAM-B DtOutputChannel:Write(buf,0) caused a DTAPI crash DTA-115: on certain PC's DMA performance caused OFDM modulation to stop working DTU-215: device was not started on a "warm" reboot DTA-2137: tuning to some DVB-S modulated streams was failing DTA-2144: double-buffered output was not supported anymore DTA-2152: bottom of frame showed a green line DTA-2152: BSOD after enabling GENREF mode for one of the ports 	
	Linux only bug fixes: Multi-threading DTAPI usage could result in a crash Dtu0 symlink was not created for some Linux distributions	



SDK version	SDK version Oct2012	
Versions	DTAPI: v5.0.11.17 Drivers: Dta v4.1.1.30, DtaNw v3.1.0.12, Dtu v4.1.2.26 DtapiService: v2.1.2.17	
Changes	New features: • Support for DTA-2138 • Optimized performance of Matrix-API audio and ancillary data embedding and de-embedding code • Added support for add/removal event for USB devices	
	Bug fixes: DVB-T2/C2 modulation did not work Failure to read licenses from DTE devices DtapiHwFuncScan did not return a DTAPI_E_DRIVER_INCOMPATIBLE when an old driver is used DtDeviceAttachToSerial did not return a DTAPI_E_DRIVER_INCOMPATIBLE when an old driver is used DTA-160/2160: exception in Dta driver on system with 64GB ofRAM DTU-236: DTAPI crash when DTU-236 is disconnected from USB bus DTU-236a: DtInpChannel::SetTunerFrequency failed when try to tune to frequencies above 862 MHz DTA-2107: spectrum of DVB-S output was inverted DTA-2107: actual SNR level did not match applied level DTA-2139: first call to AttachToPort was very slow DTA-2152: error in audio embedding when embedding less than 4 channels in an audio group Linux only bug fixes: Stack corruption when reading data from a DTU device SDK could still not be built on Red Hat Enterprise Linux 5 with kernel version 2.6.18	

SDK version Sep2012		
Versions	DTAPI: v5.0.10.16 Drivers: Dta v4.1.0.29, DtaNw v3.1.0.12, Dtu v4.1.0.24 DtapiService: v2.1.0.15	
Changes	New features: • Support for DTU-236a (1GHz version) • DTU-236: support for reading BER, SNR, MER and constellation points • Genlock support for DTA-145/2144/2145 • Support for controlling DTA-plus (VHF/UHF Booster/Attenuator for DTA-115) Bug fixes: • DTA-2107: DVB-S spectrum was inverted • DTA-2136/2139: return sensible value for SNRs which are outside of the range that can be measured by demod chip • DTA-2152: failure to set IO-standard to 720p50 • DTA-2152: VANC data was not committed in DtFrameBuffer::AncCommit • TS-rate returned for TS-over-IP streams received via a local-NIC was always ~10% to high • Non-exclusive attach of DtInpChannel object to a demodulator causes re-initialization of the port it is attached too	
	Linux only bug fixes: • DTA-2111: setting the output level had no effect • SDK could not be built on Red Hat Enterprise Linux 5 with kernel version 2.6.18 • Potential DMA data corruption, on 64-bit Linux, for cards that do not natively support 64-bit DMAs • 32-bit DTAPI could not connect with 64-bit driver. NOTE: the fix for this issue breaks backwards compatibility between the DTAPI and previous versions of the Dta, Dtu and DtaNw drivers (on 32-bit Linux configurations only)	



SDK version Aug2012		
Versions	DTAPI: v5.0.9.15 Drivers: Dta v4.0.14.27, DtaNw v3.0.7.11, Dtu v4.0.8.23 DtapiService: v2.0.9.12	
Changes	New features: Support for DTA-2139 DTA-102: implementation for DtOutpChannel::SetPower DTA-2137: support for firmware version V6 DTA-2137: support for C-version (with STV0900AAC) DTA-2137: support for getting the spectral-inversion status DtapiCheckDeviceDriverVersion now also detects the presence of pre V4 drivers Added new EULA for Linux SDK Bug fixes: DtInpChannel::GetRxMode always returned 0 for IP ports DtInpChannel::GetRxControl always returned DTAPI_RXCTRL_IDLE for IP ports CPU overload when DtapiService was stopped while used Crash in SetDemocControl if invalid ISDB-T parameters were passed to this function Linux only bug fixes: Unknown symbols when loading Dta, Dtu and DtaNw driver DtapiService.bin installer only contained 64-bit version of DtapiService DTA-2145: Kernel panic in ISR when Dta driver is loaded during system boot-up "DMA: Out of SW-IOMMU space" in Dta driver	

SDK version Jul2012		
Versions	DTAPI: v5.0.8.12 Drivers: Dta v4.0.13.25, DtaNw v3.0.7.11, Dtu v4.0.8.23 DtapiService: v2.0.8.10	
Changes	New features: Support for DTA-2131 Bug fixes: DTA-2152: fixed timeout error for WaitFrame DTA-2136: added missing loop-through capability DTA-2137: added missing support for DTAPI_STAT_CNR DTA-2135/2137: added missing support for DTAPI_STAT_BER_PRERS & DTAPI_STAT_CNR DTA-2152: DtInpChannel::ReadFrame always retuned 10-bit frames, regardless of rx-mode settings DTA-2152: error in audio embedding when embedding less than 4 channels in an audio group DtapiHwFuncScan never returns DTAPI_E_BUF_TOO_SMALL when supplied buffer really is too small DTA-235: added missing support for DTAPI_STAT_BER_PRERS & DTAPI_STAT_CNR DTU-236: added missing support for DTAPI_STAT_CNR GetloConfig for DTAPI_IOCONFIG_LOOPTHR returned incorrect buddy port value Probe attach to DTE always failed	



SDK version Jun2012		
Versions	DTAPI: v5.0.7.10 Drivers: Dta v4.0.12.23, DtaNw v3.0.7.11, Dtu v4.0.8.23 DtapiService: v2.0.7.8	
Changes	Bug fixes: AttachToPort, with the probe flag set, failed for DTEs Could not set DTAPI_RXMODE_TIMESTAMP32 for DTE devices Deadlock in DtFrameBuffer::WriteSdiLines DtInpChannel::SetLnbVoltage always returned DTAPI_E_INVALID_ARG DtIsdbtPars::RetrieveParsFromTs always sets m_Guard to 1/8 DVB-S2 capability was missing for DTA-2137 Exception in DTAPI which occurred when an application using the DTAPI was closed Link errors due to missing symbols in VC9 version of the DTAPI Memory leak in modulation code Using SetloConfig to set a fractional IOSTD failed for the input of a DTA-2152 Updated FIFO load algorithm for a DTA-2152 in 'DtOutpChannel-mode'	

SDK version May2012		
Versions	DTAPI: v5.0.5.8 Drivers: Dta v4.0.11.20, DtaNw v3.0.7.11, Dtu v4.0.7.22 DtapiService: v2.0.6.7	
Changes	Major new release of the entire SDK. Please refer to DTAPI 5.0 Release Notes in the SDK documentation for an overview of changes.	