

## TeamSpirit® 3.1 Voice&Video Engine PC

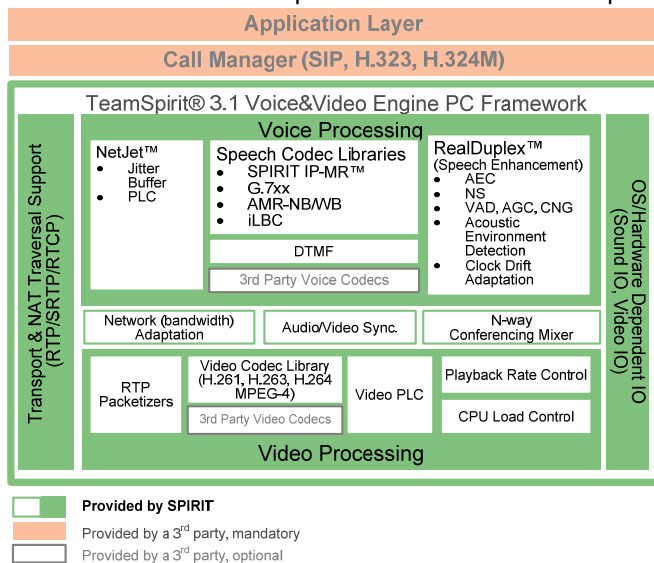
After the completion of their transition to “all-IP” / NGN, reducing the cost of delivering high bandwidth content, carriers are considering strategies to roll out profitable IP-services. Unified Communication, Enterprise Mobility, IMS, SoIP and basic IP calls have become an inseparable part of their service offering.

All of them include real-time voice and video over IP communication feature via a PC-based client application. The quality of IP communications becomes the key to the overall services’ success, as users are unwilling to put up with the degradation of the PSTN quality and reliability, while “smart IP networks” are not ready to guarantee end-to-end quality, because of the jammed last miles, congested backbones and network interconnection nodes.

To secure the end-to-end video communication quality, SPiRiT offers its carrier-grade client-side VoIP software – TeamSpirit® 3.1 Voice&Video Engine PC. The Engine complements (and remarkably amplifies!) network-specific QoS for positive user experience with IP-services.

### Overview

The innovative TeamSpirit® PC is a voice and video engine SDK for real-time communication over IP networks. SPiRiT’s carrier-grade wideband Voice&Video Engine secures high quality, reliable performance and smooth voice and video synchronization in carriers’ IP services, compensating for all critical quality issues, including congestions, latency, packet loss, echo and noise during P2P and multi-user communication. TeamSpirit® includes a patent-free SPiRiT IP-MR™<sup>1</sup> codec, specifically optimized for voice transmission over IP networks and robust to packet loss. An extended set of multimedia features makes TeamSpirit an ideal choice for IMS platforms.



### Benefits

- Carrier-grade voice and video for customer satisfaction with IP services
- Compliant with major (ITU-T and TIA) international voice quality standards
- Complete, reliable, pre-integrated solution – already deployed for IP services delivery by leading telecom operators

### Key Features

- Integrated engine framework to secure voice and video quality regardless of connection type
- HD video support (1280x720)
- Network optimization for reliable performance in both managed and unmanaged networks
- Amazing voice and video quality regardless network conditions
- Patent-free IP-optimized SPiRiT IP-MR™ codec, ITU G.7xx codecs
- Support for both IMS and traditional VoIP architecture

### Applications

- Carriers’ IP services: Unified Communications, SoIP, IMS, basic IP voice and video calls
- Video softphones
- Instant messengers
- IMS clients

### Availability

- Windows 98/2K/XP/Vista, Windows 7
- Mac OS X
- Linux

### Features

- Proprietary video engine securing the highest video quality. Includes standard (H.26x, MPEG-4) and proprietary (On2 VP6, VP7) video codecs combined with the option to plug-in external video codecs
- HD video support (1280x720)
- Traditionally high voice quality. Includes SPiRiT IP-MR™ - proprietary IP-optimized patent-free voice codec and standard G.7xx codecs combined with the option to plug-in external voice codecs
- Network adaptation module to compensate for IP-related issues
- Accurate voice and video synchronization
- Resource-efficient solution to lower processor load and perform well in multitasking environment
- Support for different call scenarios: pc2pc calling, pc2pstn calling, ad-hoc conferencing

<sup>1</sup>The payload of SPiRiT IP-MR™ codec is currently being standardized by the Internet Engineering Task Force (IETF)

## Specifications

<b>Speech Codecs</b>	<ul style="list-style-type: none"> <li>▪ SPIRIT IP-MR™*</li> <li>▪ G.711, G.723.1, G.726, G.729AB</li> <li>▪ GSM AMR-NB, GSM AMR-WB</li> <li>▪ 3<sup>rd</sup> party codec support</li> </ul>
<b>Video Codecs</b>	<ul style="list-style-type: none"> <li>▪ H.264, H.263, H.261, MPEG-4</li> <li>▪ On2 VP6, VP7**</li> <li>▪ 3<sup>rd</sup> party codec support</li> </ul>
<b>Video Engine</b>	<ul style="list-style-type: none"> <li>▪ Video packet loss concealment including forward error correction</li> <li>▪ Video conferencing mixer</li> <li>▪ Video ARS</li> </ul>
<b>IMS Features support</b>	<ul style="list-style-type: none"> <li>▪ 3gp video sharing</li> <li>▪ Voice and video recording</li> <li>▪ 3gp playback/record</li> <li>▪ RTSP, SDP protocols</li> <li>▪ Push-to-talk</li> </ul>
<b>Speech Enhancement - RealDuplex™</b>	<ul style="list-style-type: none"> <li>▪ Acoustic Echo Cancellation (<i>operates in full duplex mode, consumes 30 MIPS</i>)</li> <li>▪ Notebook Wizard for automatic AEC configuration (<i>secures high speech quality in hands free mode</i>)</li> <li>▪ Noise Suppressor (<i>tightly integrated with AEC to provide superior voice quality</i>)</li> <li>▪ Automatic Gain Control (<i>adjusts speaker and microphone gains</i>)</li> <li>▪ VAD/CNG/DTX (<i>minimizes channel payload during silence periods</i>)</li> <li>▪ Clock Drift Control</li> </ul>
<b>Video processing</b>	<ul style="list-style-type: none"> <li>▪ Audio/Video Synchronization</li> <li>▪ CPU Load Control</li> </ul>
<b>Signaling</b>	<ul style="list-style-type: none"> <li>▪ SIP** (RFC 3261), Jingle</li> <li>▪ Any proprietary signaling protocol</li> </ul>
<b>Telephony Algorithms</b>	<ul style="list-style-type: none"> <li>▪ DTMF over RTP in-band (ITU-T Q.23), out-of-band (RFC 2833)</li> </ul>
<b>Network Optimization</b>	<ul style="list-style-type: none"> <li>▪ Adaptive Jitter Buffer</li> <li>▪ Voice Packet Loss Concealment (<i>up to 30%</i>)</li> </ul>
<b>Media Transport</b>	<ul style="list-style-type: none"> <li>▪ RTP/RTCP (RFC 3550/3551 (IETF SIDD0064/0065))</li> </ul>
<b>Supported OS</b>	<ul style="list-style-type: none"> <li>▪ Windows 98/2K/XP/Vista, Windows 7</li> <li>▪ Mac OS X</li> <li>▪ Linux ***</li> </ul>

\*The SPIRIT IP-MR™ codec, which payload is currently being standardized by the Internet Engineering Task Force (IETF), has been developed specifically for packet networks and ensures maximum speech quality on both the LAN and global IP networks such as the Internet.

\*\*Functionality is available through partners

\*\*\* Call for details

## CONTACTS

General: 1-408-540-6033  
[www.spiritdsp.com](http://www.spiritdsp.com)

Russia: 7-495-661-21-78

France: 33-623-021-563

Israel: 972-3-736-9763

Italy: 39-02-6680-2557

Germany: 49-641-48-08300

USA: 1-888-374-4410

Canada: 1-888-374-4410

Japan: +81-3-6361-8080

Taiwan: 886-2-2888-1010, 886-2-2696-0055

Korea: 82-70-7780-9910, 82-2-33473-5080

China: 86-21-63502288-820

Singapore: 65-6744- 9789