Unicoi Systems Business Summary

Unicoi Systems Inc. (Unicoi) provides embedded software and reference design solutions to consumer and industrial electronics manufacturers worldwide. Unicoi's Fusion Embedded Software and Fusion Reference Designs speed development cycles and accelerate project profitability.

The Fusion Embedded Software family of products boasts a complete selection of networking protocols (including the Fusion TCP/IPv4/IPv6 networking stack, the most widely deployed embedded networking stack in the world), security enhancements, web services, file system software, user interface tools, and the license-free Fusion RTOS.

The Fusion family of reference designs provides an off-the-shelf hardware/software development platform from which to jumpstart development projects. The Fusion family of software products powers Fusion Reference Designs for VoIP telephones, multimedia devices, and VoIP terminal adapters and gateways.

Customer Devices:
VoIP Phone

About Unicoi Systems

Unicoi Systems, Inc. was founded in 2000 with a vision of creating a software company that would allow any embedded device to take advantage of network and Internet content. From its headquarters in Atlanta, Unicoi has strategically assembled unparalleled software solutions and reference designs that allow designers of multimedia and network-connected devices to get their products to market in a fraction of the time normally required. More than 300 companies rely on Unicoi to power their solutions, including leading technology companies Motorola, Sharp, Raytheon, Cisco Systems and Sony.

Fusion Embedded Software

Unicoi Systems offers one of the embedded systems industry's widest selections of market-proven software for networking, web services, security, file and operating systems, and voice processing. Much smaller, faster and better supported than open source solutions, Unicoi's embedded software comes ready-to-install, having been rigorously designed and tested. With Unicoi's extensive, fully-integrated software solutions, developers enjoy "plug-and-play" compatibility when adding new modules to existing Unicoi software, thereby avoiding the hassles of multi-vendor integration.

By taking advantage of the breadth of Unicoi's software product lines, developers can quickly incorporate a wide range of functionality, easily and affordably, while dedicating more time to critical product differentiating features and functionality.

Fusion VoIP Reference Designs

Unicoi Systems offers a compelling array of scalable Voice over IP (VoIP) solutions that enable product developers to build intelligent devices using state-of-the art, market-proven technologies. This full range of VoIP solutions offers an unmatched

user experience with PSTN-quality service and exciting IP features.

Unicoi Systems' voice engine software, a flexible VoIP solution created for IP phones, terminal adapters and gateways, is designed to produce the best quality sound possible in Internet telephony. It provides an efficient framework for real-time voice processing, and has been pre-integrated and rigorously tested. The solution integrates features such as Unicoi's family of voice codecs, acoustic and line echo cancellation software, a dynamic jitter buffer, and a packet loss compensation module.

Fusion Multimedia Reference Designs

Unicoi Systems' IP Media Reference Designs give product developers the flexibility to offer streaming audio and video solutions on virtually any type of consumer or industrial electronics device. Key components of the multimedia reference designs include:

- A media player that handles popular digital media formats including MP3, WMV, H.264, MPEG-2 and -4, JPEGs and more
- Versatile networking (10/100 Ethernet, 802.11b/g wireless) and mass storage (USB 2.0, SD, NAND) support
- A proprietary web browser with an intuitive user interface
- A CIFS-based file manager that enables access to files on any networked device

- A SIP-based VoIP softphone with instant messaging and presence

Engineering Services

At Unicoi Systems, our engineering experts help companies convert pioneering product concepts into complete designs ready for manufacturing. For years, our talented staff of design engineers has worked with the internal engineering teams at companies like Thomson, Motorola and ABB. Unicoi has been especially successful in delivering fully functional VoIP phones and handheld communication devices to a variety of global clients who simply assign the appropriate brand labeling to products in order to go to market. Unicoi Systems' services include the following:

- Product realization
- Reference design development
- DSP-based designs
- VoIP services
- Software architecture design
- Device driver development
- Software porting
- Embedded systems and application development
- Protocol stack development and porting
- Networking services
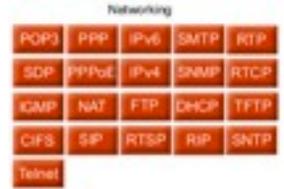- Third-party software integration
- Hardware design services

Fusion Embedded Products

Networking					Web		Security	Voice	File	Reference Designs
POP3	PPP	IPv6	SMTP	RTP	Browser	DOM	SSL	Algorithms	NOR	IP Media
SDP	PPPoE	IPv4	SNMP	RTCP	HTML UI	SAX	IPsec	Codecs	NAND	IP Phone
IGMP	NAT	FTP	DHCP	TFTP	HTTP	SOAP	IKE	VoIP	SD	Terminal Adapter
CIFS	SIP	RTSP	RIP	SNTP					SDHC	VoIP Gateway
Telnet										

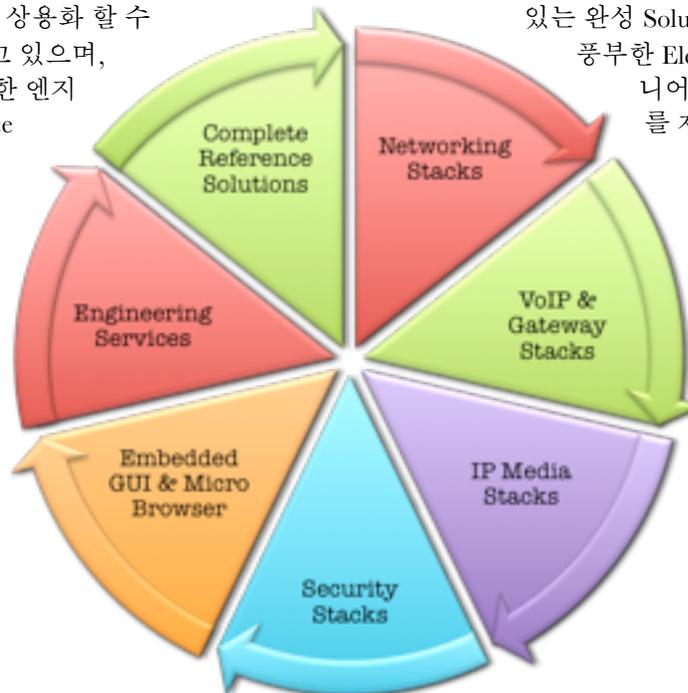# Fusion Software Offering
Major Applications

"Networking Stacks" Fusion TCP/IPv4/v6 는 300 여개가 넘는 Global기업의 수천만개 이상의 제품들을 통해서 시장에 검증이된 가장 널리 사용되고 있는 상용 Networking Stack입니다. 특히 IPv6 Phase II인증을 받은 소수의 업체로, 일반 Consumer 제품 뿐 아니라, 그 안정성 및 강력한 보안기능으로 Defense 및 Security 시장에서 널리 활용이 되고 있습니다. 특히 IPv4 가 갖고 있는 구조적인 한계사항으로 신규 Embedded 기기에서 IPv6에 대한 수요는 점점 커지고 있습니다.

"VoIP (Gateway Stacks)" Networking Stacks 에 이어 Fusion은 VoIP products 으로 시장에서 잘 알려져 있습니다. 특히 Secured SIP(SIPs), 및 Secured RTP/RTCP 솔루션은 미국의 Major Defense 회사에서 VoIP 통신에 활용하고 있어 그 안정성 및 Stack의 신뢰성이 검증되었습니다. VoIP solution 중 IP Phone등에 활용되는 SoftPhone은 Platform Independent 한 Complete Package Solution Offer를 하며, 고객사의 H/W환경과 관계없이 Plug-and-Play 가 가능합니다. 또한 Fusion Voice Engine은 Voice통신에 핵심인 음성 통화 품질을 향상시키는데, 큰 기여를 하고 있으며, 미국의 Major방위산업업체중 하나인 록히드 마틴사에서 Military급 음성통신 모듈에 활용하고 있습니다.

"IP Media Stacks & Fusion WebPilot" Cisco, Thompson, Sony 사등 주요 STB업체에서 Unicoi의 IP Media Framework을 활용하여 Global Market에 제품을 공급하고 있습니다. Fusion RTP/RTCP, Fusion RTSP Server/Client 은 STB 및 IP 기반의 Media기기에 최적화된 Solution을 공급하고 있으며, Embedded GUI 에는 Fusion WebPilot Micro Browser를 활용해서 Web Content View 뿐 아니라, Direct Hardware Access 기능을 통해서 Embedded GUI환경을 쉽게 구현할 수 있습니다. Fusion IP Media Framework은 Panasonic의 Automotive Division을 통해 미국 디트로이트 Auto Show 및 NVIDA Show에서 그 성능을 뽐내기도 했습니다.

"Complete Reference Solution & Engineering Services" Unicoi 사는 IP Phone, VoIP Gateway, RoIP, SoftPhone, IP 할 수 있는 Solution 들을 고객사에서 Design 있는 완성 Solution의 Reference 풍부한 Electric Engineering을 배니어들을 통한 Custom 를 제공해 드리고 있습니

Media Box(STB) 등 Vertical Market에 대응 만 수정해서 바로 상용화 할 수 Design을 제공하고 있으며, 경지식으로 보유한 엔지 Engineering Service

Fusion Software Development Kit
VoIP App/ WebPilot

"Fusion InstaVoIP" Fusion InstaVoIP Starter Kit 는 VoIP 관련 Product을 쉽게 개발 및 TEST할 수 있도록 만든 개발 킷이며, InstaVoIP 모듈은 Daughter Card형태로 당장 고객사의 제품에 Plug-and-Play해서 상용화 할 수 있도록 만든 저전력 Green Module입니다. InstaVoIP Starter Kit는 공개 License인 Eclipse IDE Tool을 통해서 Development/Debugging/Testing을 할 수 있도록 구성된 경제적인 개발 킷 입니다.VoIP 제품 (IP Phone/Voice Gateway, Intercom), RoIP (Radio Over IP)제품, Audio Player(MP3, OGG, WMA, WAVE), Voice Recorder, Industrial Controller, Remote Speakers, Internet Radio, PA System, Data Logging, PLC Controller 등을 개발한다면, InstaVoIP 은 귀사의 Plug-and-Play Solution이 될 수 있습니다.

"Fusion WebPilot" Unicoi Fusion WebPilot은 Web2.0 Compliant Web Browser이면서, Embedded 환경에서 직접 Hardware의 입출력을 제어할 수 있는 GUI를 개발하는데 적합한 Middleware입니다. Fusion WebPilot Starter Kit는 삼성전자의 ARM 기반 의 CPU에 대표적인 Embedded RTOS인 MicroC/OS II기반에 WebPilot을 Test해 볼 수 있는 개발 KIT이며, Touch Screen기반의 App을 Test해보는데 적합한 개발 킷 입니다.

InstaVoIP Starter Kit

Fusion WebPilot Starter Kit