

CONTROL THROUGH NATURAL SPEECH

EMBEDDED SPEECH PROCESSING KIT

The Springfish Technology GmbH, in cooperation with Bluetechnix Mechatronische Systeme GmbH, produce an Embedded Speech Kit that analyzes speech input, "understands" its meaning and responds to it with a speech output or action – in real time!

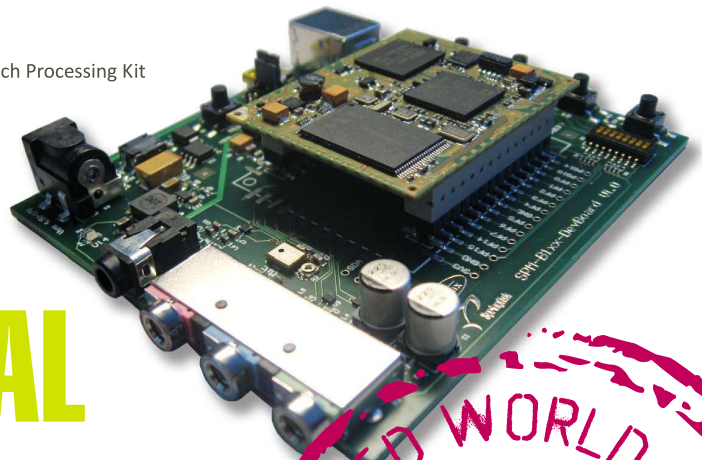
For the first time, the new module, "SPM-B101", makes it possible to integrate a capable speech recognition and speech control in existing systems, independent of speakers.

The module, approx. 38 x 48 mm in size, is a high integrated overall solution, not much larger than a conventional processor.

It can be located in every form of existing hardware (lift controls, door systems, industrial automation, safety systems, medical and consumer applications) with minimum effort.

THE ADVANTAGES

- Provides Natural Language Understanding
- The system recognizes up to 120.000 commands in German and US English, independent of speakers
- Fascinating and new options of control
- Enormous variety of applications
- Enhancement in value of your system
- Significant savings with regard to Time-to-Market
- Power dissipation < 1 W



COMPONENT PARTS OF THE EVALUATION KIT

- Speech control module "SPM-B101"
- Evaluation board "ADEV-BF52xC"
- USB cable
- Micro USB cable
- Power supply
- Loudspeaker kit
- Microphone
- Installation and driver CD
- Operating instructions and support information

SOFTWARE FEATURES

- Speech recognition Core NUANCE® Vocon ⇒ recognizes up to 120.000 commands in German and US English (additional languages upon request) independent of speakers
- Speaker verification Core ⇒ identifies up to 500 persons, phonem based
- Audio Playback-Core in HiFi quality ⇒ facilitates audio playback and recording in MP3 and other formats
- Mounted FAT32 file system, ⇒ for storage of up to 15.000 MP3's (High Compression)
- Batch and console control, ⇒ for the development of own program processes in Real Time OS

ADEV-BF52XC EVALUATION BOARD

The ADEV-BF52xC is used to evaluate the speech control module and establishes the link to the environment: headset, external loudspeaker, supply voltage, USB connection to the PC, as well as serial connection to the application are available. There is also a microphone, as well as free responsive LED's and keys. The voltage supply is maintained flexible with 4 – 17 V.

The evaluation board is also used for the option to develop customer-specific, speech control applications.

ADEV-BF52XC EVALUATION BOARD

SUPPORTED CORE MODULES	SPM-B101
USB / UART CONVERTER	yes
MICRO USB 2.0 PLUG	yes
KEY	4 off
LED	4 off
RESET SWITCH	yes
SILICON MICROFON	yes
MICROPHONE CONNECTION	yes
SEPARATE HEADPHONE CONNECTION	yes
ADDITIONAL FEATURES	Line In / Out connections
DIMENSIONS	95 x 80 mm

SPM-B101 FEATURES

PROCESSOR	ADSP-BF525C Blackfin® DSP
CLOCK	600 MHz
LOCKBOX SECURE TECHNOLOGY	yes
I ² C / SPI / UART / SPORT	1 / 1 / 1 / 1
USB 2.0 OTG	1
INTEGRATED AUDIO CODEC	Stereo, 24-bit ADCs und DACs
RAM	64 MByte SDRAM
FLASH	4 MByte NOR und 1024 MByte NAND
TEMPERATURE RANGE	Commercial (0 °C – 70 °C)
ADDITIONAL FEATURES	Mic., Line In / Out and HP Interface On-Board core voltage regulator Low voltage reset circuit
DIMENSIONS	38 x 48 mm

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