



Adaptive Digital Technologies, Inc.

ADT 9600 Voice Coder

PRODUCT DESCRIPTION

The Adaptive Digital Technologies ADT-9600 voice coder software is a real-time implementation of Adaptive Digital's proprietary 9600 bps speech compression algorithm. This algorithm provides good speech quality at a low bit rate. This software runs on the Texas Instruments (TI) TMS320C5000 family of Digital Signal Processors (DSPs).

FEATURES

- Functions are C-callable
- Multiple channel operation
- Capable of in-band synchronization.
- Can be integrated with echo cancellers, and tone detection/regeneration.

AVAILABILITY

ADT 4800 is available on the following Platforms: Other configurations are available upon request.

| Product | Platform | Memory Model | Endian | Code Gen Tool Version |
|---------------|---------------|--------------|--------|-----------------------|
| ADT_9600_c54x | TI TMS320C54x | Far | N/A | N/R |

Endian, byte order: "Little Endian" means that the low-order byte of the number is stored in memory at the lowest address, and the high-order byte at the highest address. "Big Endian" means that the high-order byte of the number is stored in memory at the lowest address, and the low-order byte at the highest address.

Mm – Memory Model: Memory Model is specific to Texas Instruments processors.

SPECIFICATIONS

Coding Rate: 9.6 kbps

Sampling Rate: 8 kHz

Delay: 15 msec.

TI TMS320C5000

C54x

CPU UTILIZATION & MEMORY REQUIREMENTS

All Memory usage is given in units of 16-bit word.

| Software | MIPS (Peak) | Program Memory | Data Memory | Per-Channel Data Memory |
|--------------|-------------|----------------|-------------|-------------------------|
| Encode build | 22 | 11500 | 4900 | 1400 |

Last update: 05/12/2002

FUNCTION

| | |
|----------------------------------------------|------------------------------------------|
| <code>decInitialize9600Channel(. . .)</code> | Initializes the ADT9600 decoder software |
| <code>codInitialize9600Channel(. . .)</code> | Initializes the ADT9600 encoder software |
| <code>Encode_ADT_9600 (. . .)</code> | Executes the ADT9600 encoder |
| <code>Decode_ADT_9600 (. . .)</code> | Executes the ADT9600 decoder |

Deliverables

The deliverable items are platform dependent. In general, there is one library. (Sometimes multiple variants of the library are included in the deliverables.) There are also header files, some of which are specific to the product and others are common across many of Adaptive Digital's products. Also included in the deliverables is product documentation, which includes a users guide and usually includes release notes and a data sheet. Sample/test code may be included as well.

Adaptive Digital is a member of the Texas Instruments Developer Network, and ARM Connected Community.

CONTACT INFORMATION

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