

## SCT3268TD

### DMR/dPMR Processor with Analog Mode (Embedded AMBE+2™ Vocoder and Host Microcontroller)

The SCT3268TD is a highly integrated, low power, high performance, Digital/Analog PMR/LMR baseband processor with an embedded Vocoder and ARM 32-bit Cortex-M0 host microcontroller.

#### Features

Supports Multiple Radio Protocols

Automatic Digital/Analog mode detection

##### DMR standard

- Supports DMR Tier 1, Tier 2
- Air interface Layer 1, Layer 2, Layer 3
- Full Annex C support
- Transmit in slotted or continuous mode
- Receive in slotted or continuous mode

##### dPMR standard

- Supports dPMR Tier 1, Tier 2
- Air interface Layer 1, Layer 2, Layer 3
- Supports 1031Hz Tone and Silence Test Mode
- Full Annex A support

##### Analog Mode

- Full audio processing including compander
- CTCSS/DCS detection/generation
- Supports two-point modulation

##### Embedded Vocoder

- Support for multiple vocoders
- Embedded: AMBE+2™, RALCWI™
- External vocoder options

##### 4FSK Modem

- 4800/9600 data rate
- Automatic frame sync detection
- Programmable modulation index

##### Built-in ARM 32-bit Cortex-M0 Microcontroller

- System frequency up to 48MHz
- 12-channel DMA access
- 12 Timers, 8 USART

##### Low power operation

- DMR mode Baseband 64mW, MCU 24mW
- dPMR mode Baseband 38mW, MCU 24mW

The SCT3268TD is available from CML's 'Sicomm Technologies' product range that is specifically targeted at high volume and low cost radio applications.

The SCT3268TD includes the entire physical layer, data link layer and much of the call control layer processing of the digital PMR/LMR radio protocols. Combined with a suitable RF front end, external audio codec and host controller, a complete digital radio that also supports analog mode can be developed in a short time frame.

The Design Reference SCT9389 provides an easy route to developing a multi-mode DMR/dPMR/Analog radio.

For further details please visit CML's website and technical portal at [www.cmlmicro.com](http://www.cmlmicro.com).



BGA144 Package

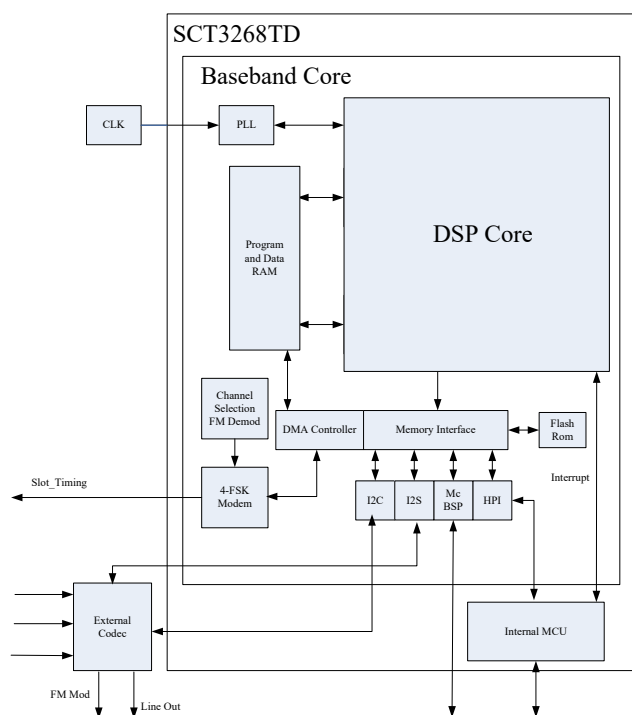
#### Applications

- DMR Radio
- dPMR Radio
- Multi-mode Digital PMR/LMR with Analog Mode

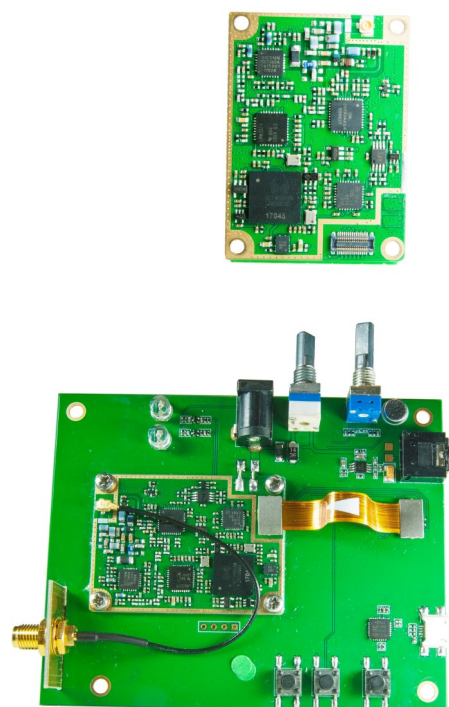
#### Key Advantages

- Proven Technology
- Complete solution capability
  - Dedicated chipset
  - ETSI focused design reference
- Fast route to market
- Low operating power
- Highly integrated solution
- RF support:
  - Conventional FM receiver
  - Direct Conversion receiver
- Embedded AMBE+2™ Vocoder option
- Fully supported evaluation kits

## Block Diagram

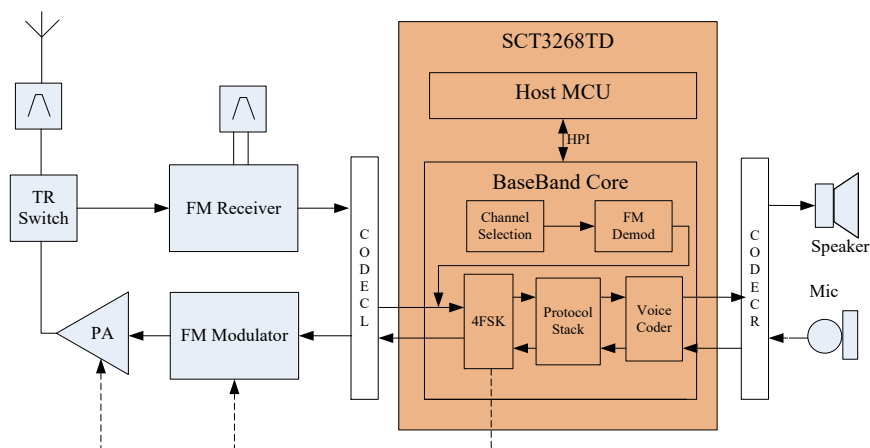


## SCT9389 Design Reference Example



## SCT9389-HDK

## Typical Application



RALCWI is a trademark of CML Microsystems Plc and AMBE+2 is a trademark of Digital Voice Systems Inc..

## WHAT TO DO NEXT

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