Speaker Verification

Part number

♦ RS8201

Overview

The RS8201 verifies if the incoming voice signal matches given code book characteristics

Deliverable

♦ Close source database (GDSII)
♦ HDL
♦ OVM test benches
♦ Support

Applications

♦ Car key with remote control
♦ Garage opener remote control
♦ Hotel room doors
♦ Key-less entry system
♦ Hotel room safe

Algorithm

♦ Energy for voice detection
♦ Pre-emphasis
♦ Hamming Window
♦ Linear Prediction Coding
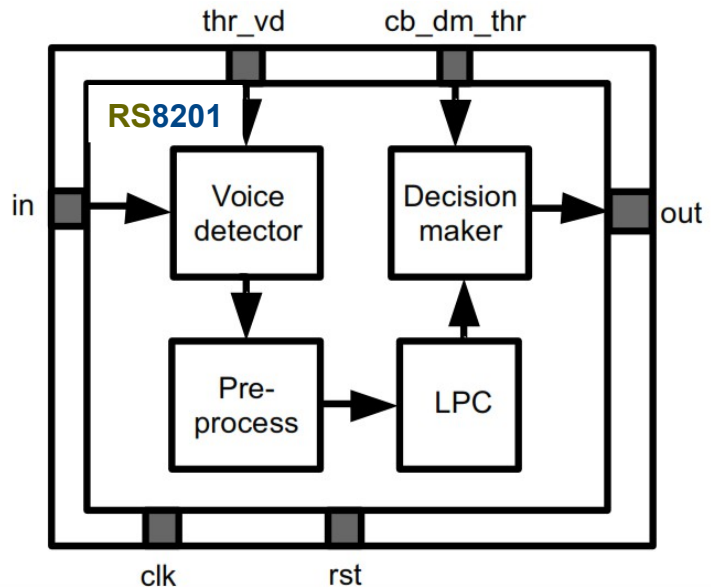♦ Coefficients
♦ Matching by Vector Quantization

Real time

♦ Decision output as soon as enough input samples received
♦ 25 ms latency

Technology node

♦ XFab XH035

Block diagram

Main specifications

Parameters	Value
Input samples bits	16 bits
Input sample rate	11 kHz (recommended)
Output	2 bit (good-bad-n.d.)
Response time	0.2 ... 7 s
Power consumption	15 mW

Interface

♦ AMBA-AXI4 Lite

Contact

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