

DelCom Systems Inc.

DCS VON ALGORITHMS STARCORE®

Algorithms for Cellular Applications

DelCom Systems offers a complete suite of voice band algorithms for Cellular and PCS Applications. This object-oriented suite provides a scalable solution, enabling development of high-density applications. All voice coder algorithms are tested using test vectors supplied by the appropriate authority (ETSI, EIA/TIA). These algorithms are

based upon DelCom's portable C model. They have been ported to a variety of processors and hand optimized to increase the achievable density. The following table summarizes performance on the Starcore® family of Digital Signal Processors.

Starcore® VON Algorithms Performance Specifications (Summary)

Cellular Voice Codecs					
Vocoder	MCPS	Program Memory (Kbytes)	DATA MEMORY (Kbytes)		Example Applications
			Tables	Vocoder State	
GSM-FR	2	34	1	2.1	GSM, VON
GSM-EFR	7	54	15.5	5.8	GSM, VON
EIA/TIA-IS641 (ACELP)	6.7	40	10	2.5	North American TDMA (IS-136)
GSM-AMR	7.6	65	31	4.4	GSM
EVRC (IS-127)	10.8	65	15	4.7	CDMA Cellular
QCELP-13 (IS-733)	13.8	53	12.2	5.7	CDMA Cellular

NOTE: DelCom's development is ongoing. DelCom reserves the right to make changes to its specifications without notification.