

# G.723.1-C64x Data Sheet

## Introduction

Beijing YiYuanZhuCheng Technologies (YYZC) G.723.1 voice coding software is an implementation of ITU Recommendation G.723.1 6.3 & 5.3 kbit/s CELP Speech Codec with Annex A. The software runs on the Texas Instruments (TI) TMS320C64X family of Digital Signal Processors. The G.723.1 voice codec provides near toll speech quality at a compressed data rate of 6.3 or 5.3 kbit/s. The G.723.1 is used in wireless voice, voice-over-packet-networks, multimedia, and voice circuit multiplexing applications. Both encoder and decoder pass all ITU-T test vectors.

## Resource Requirements<sup>\*†‡</sup>

Software	MCPS (Peak)	MCPS (Average)
Encoder (6.3k)	4.66	3.93
Encoder (5.3k)	5.57	4.87
Decoder	0.39	0.36

Software	Program Memory		Const Data Memory	Scratch Memory	Stack Memory	Per Channel Data Memory	
Encoder (6.3k)	8,544	+18,368	+7,104=34,016	18,932	4,020	280	1,418
Encoder (5.3k)			+7,712=34,624		4,868	312	1,418
Decoder		+8,096=16,640	2,432		240	402	

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## Contact

Web: [www.yydsp.com](http://www.yydsp.com)

Email: [yyzcdsp@gmail.com](mailto:yyzcdsp@gmail.com)

\* All MCPS results are based on TI CCS2.20.18 C64xx Cycle Accurate Simulator when encoding/decoding the ITU-T test vectors. The real cycles may vary when running on different C64x DSPs and different inputs.

† All memory usage figures are given in unit of byte.

‡ YYZC keeps the right to update the software without updating these figures.