



RoadComm, Inc.

**RoadComm SpeechCommand™
Embedded Speech Recognizer**

“dynamic” small vocabulary (50 - 100)
select by user

10K program, 9K search, 500 per word,
altogether a 16-bit, 64K system,
< 40 MIPS

small vocabulary grammar, better performance

MLLR phonetic adaptation

word specific adaptation (stronger than MLLR)

speaker-dependent enrollment

mixed speaker-independent grammar
and speaker-dependent enrollment

With speaker verification



3rd Party Window Based Recognizer

large vocabulary dictation

> 100M disk to install, 64M RAM to run

no easy way to constrain grammar

same

no

no

no

Without speaker verification

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**Road-Com SpeechCommand™
Embedded Speech Recognizer**

Other Embedded Speech Recognizer

dynamic vocabulary

advertised, factory prepare
model generation (phonetic acoustics, dictionary, etc)
not implemented on embedded system

mixed speaker-dependent enrollment and
speaker-independent grammar

stand-alone, no mix

MLLR phonetic adaptation

no (factory tune performance)

word specific adaptation (to adapt accent)

no

fixed-point C code, port to any chip
C54, C55 (can be compiled for ARM)

?
most are for ARM (32-bit), not for 16-bit DSP
ARM ~ 500 mW, C54/C55 ~ 10 mW

With speaker verification

Without speaker verification

Continuous recognition

Without continuous recognition

TI Certified ExpressDSP™ Compliance

?

Please contact sales@roadcomm.com for quotation or demo!



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