

C715997 : MAJOR ELECTRICAL ENGINEERING

KEY WORD: VORAPOJ PATANAVIJIT : DESIGN OF A REAL TIME DIGITAL SPEECH PROCESSING SYSTEM USING TMS320C25. THESIS ADVISOR : ASSOC. PROF. SOMCHAI JITAPUNKUL, Ph.D. 66 pp. ISBN 974-636-215-1.


The objective of this thesis is to design and implement a digital speech processing system using TMS320C25 . The system consists of a digital signal processor, two memory units for switching and transferring data between MPU and PC, an analog-to-digital converter, and an interface section. The infrastructure of hardware and software which are necessary for development of a through ISA bus including the better performance digital speech processing system, including a sample software which simulates to the digital speech processing method developed at the Digital Signal Processing Reserch Laboratory (DSPRL).

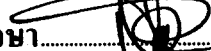
The implemented hardware of Digital Speech Processing System utilizes ADC0804 of National Semiconductor, for interfacing between analog path and digital path, and TMS320C25 of Texas Instrument Incorporated. for main processor. Assembly language is used for TMS320C25 and Microsoft Visual C++ (version 1.52) language is used for developing the operation control software. The developed system was tested with the algorithms of speech recognition, developed at the DSPRL the results show a good performance.

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