CHANARONG ANGTHONG : DEVELOPMENT OF A TELETEXT INSERTER USING VHDL , THESIS ADVISOR : ASSO.PROF.EKACHAI LEELARASMEE, Ph.d. 99 pp.

ISBN 974-634-913-9

This thesis describes a prototype design of a teletext inserter. It is used in conjunction with a personal computer that compiles teletext data and delivers to the inserter through its serial port. Inside the teletext inserter, a microcontroller is used to manage the data in a bank of static RAM that can store up to 700 pages of teletext data. These data are read and shifted out at 6.9375 megabits per second by a serial teletext data shifter. The data shifter is an FPGA chip that is designed using VHDL modules. The shifted data constitutes a digital signal that can be inserted in a video signal at any selectable scan lines between 7(320) and 22(335). This teletext inserter has also a built-in video source and a ROM that already stores 7 pages of teletext data in order to maintain its funcnality in the absence of the personal computer and the external video source.

ภาควิชา........วิศวกรรมไฟฟ้า.................... ลายมือชื่อนิสิต..

สาขาวิชา........วิศวกรรมไฟฟ้า.................... ลายมือชื่ออาจารย์ที่ปรึกษา........................

ปีการศึกษา........2539.......................... ลายมือชื่ออาจารย์ที่ปรึกษาร่วม...................