

PACKAGE ID - 000729IB48600 SASIL

KWIC TITLE - Sandia ATM SONET Interface Logic

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LIMITATION CODE -COPY **AUDIENCE CODE** - LIM

COMPLETION DATE - 07/01/1994 **PUBLICATION DATE** - 07/01/1994

DESCRIPTION - SASIL is used to program the EPLD's (Erasable Programmable Logic Devices) and PAL's (Programmable Array Logic) that make up a large percentage of the Sandia ATM SONET Interface (OC3 version) for the INTEL Paragon.

PACKAGE CONTENTS - Media Directory; Software Abstract; Media Includes Source Code, Compilation Instructions, README.txt which is the User's Manual;

SOURCE CODE INCLUDED? - Yes

MEDIA QUANTITY - 1 3.5 Diskette

METHOD OF SOLUTION - Boolean algebra and state machines.

COMPUTER - IBM PC 486

OPERATING SYSTEMS - MS DOS 5.0 or higher with Microsoft Windows version 3.1

PROGRAMMING LANGUAGES - AHDL (30%), Altera Graphic Editor (60%), ABEL 5.0 (10%)

SOFTWARE LIMITATIONS - The source code which consists of AHDL and schematics produced using the Altera Graphic Editor will create programming files when compiled using Altera's MaxPlusII compiler. These files can be used to program Altera programmable logic devices (EPLD's) only. The ABEL source code, when compiled, will generate programming files that can be used to program PAL22V10C (Programmable Array Logic devices) made by Cypress Semiconductor and other manufacturers.

SOURCE CODE AVAILABLE (Y/N) - Y

UNIQUE FEATURES - SASIL is the only software available to program the EPLD's and PAL's that make up a large percentage of the Sandia ATM SONET Interface (OC3 version) for the Intel Paragon.

OTHER PROG/OPER SYS INFO - The source code, which consists of AHDL and schematics generated by the Altera Graphic Editor must be compiled using Altera's MaxPlusII compiler version 4.02 or higher. Programming files created by Altera's MaxPlusII compiler are used

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OTHER PROG/OPER SYS INFO - (CONT) to program the Altera EPLD's used to build the Sandia ATM SONET Interface. A programming interface card and a programming adapter, both made by Altera, are required to program Altera EPLD's using the programming files. The ABEL source code must be compiled using Data I/O's ABEL 5.0 compiler. A PAL programmer, made by Data I/O is needed to program the PAL22V10C's. Altera text design files (AHDL files) have a .tdf suffix, and Altera graphic design files (schematics) have a .gdf suffix. Altera also creates some files to represent lower design levels in hierarchical designs. The compiler creates a compiler netlist file with a .cnf suffix. Hierarchical interconnect files have an .hif suffix. Symbol files are created with a .sym suffix. ABEL 5.0 source files have a .abl suffix. The readme.txt file contains compilation instructions for SASIL users.

HARDWARE REQS - The Altera MaxPlusII compiler used to generate programming files requires the following system setup: 486-based IBM PC-AT or compatible computer; IBM PS/2 model 70 or higher, or compatible computer, 16 Mbytes of memory, DOS version 5.0 or higher, Microsoft Windows version 3.1, a Microsoft Windows-compatible graphics card and monitor, 30 Mbytes free disk space, 1.2 Mbyte, 5 1/4 inch or 1.44Mbyte, 3 1/2 inch floppy disk drive, 2 or 3 button mouse compatible with Microsoft Windows 3.1, Full-length 8-bit or Micro Channel Adapter slot for the programming card. The hardware requirements for ABEL 5.0 are: A 386, 486 or compatible PC, DOS version 5.0 or higher, At least 4 Mybtes of RAM, At least 6 Mbytes free disk space, plus at least 500 Kbytes disk space available for temporary files after installation.

TIME REQUIREMENTS - The compilation times will vary from 1 to 24 minutes for the various devices.

REFERENCES - User's Manual on Media.

ABSTRACT STATUS - Submitted July 27, 1994. Released AS-IS December 7, 1994.

SUBJECT CLASS CODE - TP

KEYWORDS -

COMPUTER PROGRAM DOCUMENTATION
S CODES
LOGIC CIRCUITS
PROGRAMMING
EQUIPMENT INTERFACES
COMPUTER OUTPUT DEVICES
DATA TRANSMISSION
DATA TRANSMISSION SYSTEMS
DAUGHTER PRODUCTS
DIGITAL CIRCUITS
DIGITAL SYSTEMS

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SOFTWARE ABSTRACT

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SUPERCOMPUTERS

EDB SUBJECT CATEGORIES -
990200

SPONSOR - DOE/DP

PACKAGE TYPE - AS - IS