List of Designers and their Projects

CALTECH:

BJ-5 BartonCT   Designer: Eric Barton
Description: LED array driver
Reserved space = 2126 x 2126 microns, Area = 4.52 sq mm

BJ-8 BozzutoCT   Designer: Rick Bozzuto
Description: Pulse width to binary converter
Reserved space = 2120 x 1288 microns, Area = 2.73 sq mm

BJ-1 CampbellCT   Designer: James Campbell
Description: Logical processing unit with internal registers
Reserved space = 1856 x 1704 microns, Area = 3.16 sq mm

BJ-6 CocconiCT   Designer: Alan Cocconi
Description: Array processor
Reserved space = 1896 x 1074 microns, Area = 2.04 sq mm

BL-7 DerbyCT   Designer: Howard Derby
Description: Associative Memory
Reserved space = 2170 x 2566 microns, Area = 5.57 sq mm

BL-2 EatonCT   Designer: Steve Eaton
Description: Counter/adder
Reserved space = 2500 x 1376 microns, Area = 3.44 sq mm

BM-6 EllisCT   Designer: Mike Ellis
Description: Stepping motor controller
Reserved space = 2000 x 2500 microns, Area = 5.00 sq mm

BJ-2 FuCT   Designer: Sai Wai Fu
Description: Square root generator
Reserved space = 1750 x 1626 microns, Area = 2.85 sq mm

BL-5 GrayCT   Designer: Moshe Gray
Description: Array processor
Reserved space = 2534 x 2082 microns, Area = 5.28 sq mm

BL-1 HellerCT   Designer: Jack Heller
Description: Digital filter
Reserved space = 2708 x 1326 microns, Area = 3.59 sq mm

BJ-10 HoCT   Designer: Kuo Ting Ho
Description: 10 bit rate multipler
Reserved space = 2120 x 1110 microns, Area = 2.35 sq mm

BJ-9 KingsleyCT   Designer: Chris Kingsley
Description: Serial Multipler
Reserved space = 2200 x 2064 microns, Area = 4.54 sq mm

CALTECH (cont.):

BJ-4 LiCT
Designer: Peggy Pey-Yun Li
Description: Two's-complement pipeline multiplier
Reserved space = 2176 x 1326 microns, Area = 2.89 sq mm

BM-1 LigockiCT
Designer: Terry Ligocki
Description: Scan converter chip
Reserved space = 2000 x 4108 microns, Area = 8.22 sq mm

BL-4 MostellerCT
Designers: Rick Mosteller, Greg Eflan, DIck Lang
Description: Stack-oriented micrprocessor
Reserved space = 4300 x 2996 microns, Area = 12.88 sq mm

BJ-3 PapachCT
Designer: A.C. Papachristidis
Description: Magnitude comparator
Reserved space = 2000 x 1126 microns, Area = 2.25 sq mm

BL-8 PedersenCT
Designer: Bruce Pedersen
Description: Asynchronous FIFO
Reserved space = 1896 x 2000 microns, Area = 3.79 sq mm

BL-6 PinesCT
Designer: Elliot Pines
Description: Expandable clocking pattern generator chip
Reserved space = 1780 x 1780 microns, Area = 3.17 sq mm

BJ-7 PursifullCT
Designer: Ralph Pursiful
Description: Self-Timed Queue
Reserved space = 1590 x 1590 microns, Area = 2.53 sq mm

BM-5 RumphCT
Designer: David Rumph
Description: DMA controller
Reserved space = 2442 x 2242 microns, Area = 5.47 sq mm

BJ-12 TannerCT
Designers: John Tanner and Richard Segal
Description: Single wire interface for a Manipulator (SWIM)
Reserved space = 2000 x 3000 microns, Area = 6.00 sq mm

AG-1 WalpCT
Designer: Pat Walp
Description: Array processor
Reserved space = 2126 x 2050 microns, Area = 4.36 sq mm

BL-3 WatteyneCT
Designers: Thierry Watteyne and Martine Savalle
Description: BCD/binary comparator
Reserved space = 2100 x 1600 microns, Area = 3.36 sq mm

BJ-11 WhitneyCT
Designer: Telle Whitney
Description: Address translator
Reserved space = 1940 x 2126 microns, Area = 4.12 sq mm

Carnegie-Mellon University:

[Summary of designs from CMU, updated   4-Dec-79 23:13:17]

AE-5 EbelingCMU Designer: Carl Ebeling
 Description: Rebound Sorter
 Reserved space = 1856 x 1856 microns, Area = 3.44 sq mm

AE-1 GuptaCMU Designer: Satish Gupta
 Description: Video Buffer
 Reserved space = 1006 x 5668 microns, Area = 5.70 sq mm

AE-8 HoeyCMU Designer: Dan Hoey
 Description: Experimental Adder
 Reserved space = 1188 x 1976 microns, Area = 2.35 sq mm

AE-6 KungCMU Designers: H. T. Kung, S. W. Song
 Description: Image Processing Chip
 Reserved space = 4160 x 2948 microns, Area = 12.26 sq mm

AE-7 SongCMU Designer: Siang W Song
 Description: A small database machine
 Reserved space = 2224 x 1954 microns, Area = 4.35 sq mm

MIT:

[Summary of designs from MIT, updated   4-Dec-79 23:13:17]

AB-8 AllenMIT Designers: Don Allen, Jerry Burchfiel
 Description: Variable Length Field Decoder
 Reserved space = 2218 x 2484 microns, Area = 5.51 sq mm

AB-1 BataliMIT Designer: John Batali
 Description: Zero-Crossing Detector for Image Processing
 Reserved space = 2644 x 1738 microns, Area = 4.60 sq mm

AC-4 ChuMIT Designers: Tam-Anh Chu, Nhi-Anh Chu, Steve McCormick
 Description: Second order digital filter stage
 Reserved space = 6146 x 2278 microns, Area = 14.00 sq mm

AB-3 FichtenbaumMIT Designer: Matt Fichtenbaum
 Description: A digital pulse rate monitor
 Reserved space = 2500 x 2500 microns, Area = 6.25 sq mm

AG-5 GoddeauMIT Designers: David Goddeau, Jonathan Sieber, Chris Terman
 Description: A first-in, priority-out buffer
 Reserved space = 2928 x 2954 microns, Area = 8.65 sq mm

MIT (cont.):

AB-5 GoodrichMIT   Designer: Earl Goodrich
Description: CRT controller
Reserved space = 1856 x 1520 microns, Area = 2.82 sq mm

AB-2 GramlichMIT   Designers: Wayne Gramlich, Carl Seaquist
Description: A writable PLA in which the programming of the
AND and OR planes is defined by contents of static RAM cells.
Also can program feedback loops to form finite state machines.
Reserved space = 1524 x 1906 microns, Area = 2.90 sq mm

AB-6 GrondalskiMIT Designer: Robert Grondalski
Description: Writeable PLA
Reserved space = 2200 x 2200 microns, Area = 4.84 sq mm

AC-1 HamiltonMIT   Designer: Brian Hamilton
Description: Digital Alarm Clock
Reserved space = 2500 x 2500 microns, Area = 6.25 sq mm

AG-2 KathailMIT   Designers: Vinod Kathail, Keshav Pingali
Description: an interpreter for mapping programs onto
a data flow computer
Reserved space = 1590 x 2228 microns, Area = 3.54 sq mm

AB-4 KhouryMIT   Designer: John Khoury
Description: Up-Down counter with programmable modulus
Reserved space = 2000 x 1726 microns, Area = 3.45 sq mm

AC-2 PasemanMIT   Designer: Bill Paseman
Description: Music Synthesizer
Reserved space = 4126 x 2842 microns, Area = 11.73 sq mm

AB-7 PicardMIT   Designer: Len Picard
Description: Variable format field extractor and compactor
Reserved space = 2000 x 1688 microns, Area = 3.38 sq mm

AG-3 RivestMIT   Designers: Ron Rivest, Len Adleman, Adi Shamir
Description: Section of a Multiplier
Reserved space = 2250 x 2250 microns, Area = 5.06 sq mm

Stanford University:

BI-6   AtlasSU   Designers: Les Atlas, Doug Galbraith
                      Description: This project is an neural-stim. interval timer
                      Reserved space = 2478 x 1378 microns, Area = 3.41 sq mm

BK-4 BaskettSU   Designer: Forest Baskett
                      Description: This project is an Ethernet synchronizer
                      Reserved space = 2240 x 2720 microns, Area = 6.09 sq mm

BK-7 BechtolsheimSU Designers: Andy Bechtolsheim, Thomas Gross
                      Description: A parallel search table for log arithmetic
                      Reserved space = 1514 x 3180 microns, Area = 4.81 sq mm

BK-5 Clark2SU   Designer: Jim Clark
                      Description: This project is a self-timed clock element
                      Reserved space = 1606 x 1688 microns, Area = 2.71 sq mm

BK-8 ClarkSU   Designer: Jim Clark
                      Description: This project is a simple graphics ALU
                      Reserved space = 2976 x 2764 microns, Area = 8.23 sq mm

BI-5   ElahianSU   Designers: Kamran Elahian, Fred Basham
                      Description: This project is a UART line speed determiner
                      Reserved space = 1856 x 1856 microns, Area = 3.44 sq mm

BK-3 FrolikSU   Designers: Bill Frolik, Roderick Young
                      Description: This project is a digital timer
                      Reserved space = 2120 x 2684 microns, Area = 5.69 sq mm

BI-2   GehlbachSU   Designers: Steve Gehlbach, Joe Sharp, Bill Jansen
                      Description: This project is a fast 16-input adder
                      Reserved space = 3180 x 1856 microns, Area = 5.90 sq mm

BI-8   HannahSU   Designers: Peter Eichenberger, Marc Hannah
                      Description: This project is a rectangle generator
                      Reserved space = 2386 x 2140 microns, Area = 5.11 sq mm

BI-7   HerndonSU   Designers: Matt Herndon, Jeff Thorson
                      Description: This project is a typesetting machine
                      Reserved space = 3170 x 2000 microns, Area = 6.34 sq mm

BI-1   MacomberSU   Designers: Scott Macomber, Bob Clark
                      Description: This project is a parallel/serial multiplier
                      Reserved space = 2000 x 2000 microns, Area = 4.00 sq mm

BI-3   MarkeeSU   Designers: Pat Markee, Irene Watson
                      Description: This project is a digital clock
                      Reserved space = 2120 x 1424 microns, Area = 3.02 sq mm

BK-1 MathewsSU   Designers: Rob Mathews, John Newkirk
                     Desciption: This project is the infamous Buffalo chip
                     Reserved space = 5180 x 1134 microns, Area = 5.87 sq mm

BI-4   NoiceSU   Designers: David Noice, Neil Midkiff
                     Description: This project is a multiplier/divider
                     Reserved space = 2888 x 1576 microns, Area = 4.55 sq mm

BK-6   OhChinSU   Designers: Soo-Young Oh, Dae-Je Chin
                     Description: An automatic thermostat time controller
                     Reserved space = 2120 x 1700 microns, Area = 3.60 sq mm

BN-7   TarsiSU   Designers: Mike Tarsi, Nagatsugu Yamanouchi
                     Description: This project is a multifunction digital clock
                     Reserved space = 2140 x 2276 microns, Area = 4.87 sq mm

BN-6   UttSU   Designers: Steve Utt, Shalom Ackelsberg
                     Description: This project is part of a pancreas prosthesis
                     Reserved space = 2000 x 2000 microns, Area = 4.00 sq mm

BI-9   WulffSU   Designers: Bob Wulff, Tom Bennett
                     Description: This project is a bit slice of a multiplier
                     Reserved space = 2120 x 1856 microns, Area = 3.93 sq mm

BK-2   ZarghanSU   Designers: Bahman Zargham, Jerry Huck
                     Description: This project is a multiplexed communications link
                     Reserved space = 1590 x 1550 microns, Area = 2.46 sq mm

U.C.Berkeley:

[Summary of designs from U.C.Berkeley, updated   4-Dec-79 23:13:17]

BM-2 DecuirUCB   Designers: J. Decuir, C.H.Sequin
                     Description: Squareroot of 3 approximator for
                     radix-3 block in FFT computer
                     Reserved space = 2650 x 3278 microns, Area = 8.69 sq mm

BM-3 FungUCB   Designers: W.-C. Fung, C.H.Sequin
                     Description: General purpose barrel shifter for sraggered ,
                     pipelined data in an FFT computer
                     Reserved space = 2484 x 2650 microns, Area = 6.58 sq mm

BM-4 LandmanUCB   Designer: Howard A. Landman
                     Description: This project is a reprogrammable PLA, with
                     8 each inputs, pterms, and (tri-state) outputs.
                     Reserved space = 2600 x 1590 microns, Area = 4.13 sq mm

BM-7 SequinUCB   Designer: Carlo H. Sequin
                     Description: Dual 16-stage FIFO with double rail signalling
                     Reserved space = 2460 x 980 microns, Area = 2.41 sq mm

Univ. of Illinois:

AD-3 AdrianUI

Designers: Frank Adrian, Nick Fiduccia, Bud Pflug
Description: Functional equivalent of AMD 2901 ALU
to compare MOS, TTL
Reserved space = 2710 x 4388 microns, Area = 11.89 sq mm

AE-2 ClassUI

Designers: Class
Description: Twos complement 4 x 4 array multiplier
Reserved space = 1714 x 1498 microns, Area = 2.57 sq mm

AD-2 HanesUI

Designers: Larry Hanes, Dave Yen
Description: Twos complement array divider
Reserved space = 2616 x 2636 microns, Area = 6.90 sq mm

AD-1 LuhukayUI

Designer: Joe Luhukay
Description: Pipelined multiplier, registers also used for testability
Reserved space = 2572 x 4140 microns, Area = 10.65 sq mm

AD-4 MontoyeUI

Designers: Bob Montoye, Al Casavant
Description: Carry lookahead adder
(soln. proposed by Gajski and Kung)
Reserved space = 2628 x 2626 microns, Area = 6.90 sq mm

Univ. of Rochester:

BN-3 KedemUR

Designers: Gershon Kedem and Michel Denber
Description: Infinite precision multiplier
Reserved space = 2698 x 2786 microns, Area = 7.52 sq mm

BN-2 LyonsUR

Designer: Bob Lyons
Description: Programmable Frequency Generator
Reserved space = 2748 x 2276 microns, Area = 6.25 sq mm

BN-4 SohmUR

Designers: Larry Sohm, Pat Chan, Bill Notowitz
Description: Digital Phase lock loop
Reserved space = 3610 x 2634 microns, Area = 9.51 sq mm

BN-5 TiloveUR

Designers: Bob Tilove, Jarek Rossignac
Description: This is a bit slice coordinate transformer
Reserved space = 1934 x 1326 microns, Area = 2.56 sq mm

BN-1 WatanabeUR

Designer: Yuki Watanabe
Description: Sorter slice
Reserved space = 2008 x 2240 microns, Area = 4.50 sq mm

Other places:

AC-3 GlasserOT
Designer: Lance Glasser, MIT, via Univ. of Washington
Description: Modulo-6 counter for dice game
Reserved space = 1486 x 808 microns, Area = 1.20 sq mm

AE-9 KehlOT
Designers: Ted Kehl, Ram Rao, Ed Lazowska,
Univ. of Washington, Seattle
Description: Address intercept logic for microcomputer
Reserved space = 1818 x 1782 microns, Area = 3.24 sq mm

AE-3 MurrayOT
Designer: John Murray, Univ. of Colorado, Colorado Springs,
via Univ. of Washington
Description: 3-bit identity comparator
Reserved space = 1512 x 1642 microns, Area = 2.48 sq mm

AE-4 RogersOT
Designer: Mike Rogers, Univ. of Bristol, Bristol, England,
via Univ. of Washington
Description: Simple 3-bit enciphering/deciphering chip.
Reserved space = 1248 x 1708 microns, Area = 2.13 sq mm

AF-1 Schip2
Designers: Gerry Sussman, Jack Holloway, Guy Steele, Alan Bell
MIT-AI Laboratory/Xerox PARC-SSL
Description: Lisp Microprocesser
Reserved space = 5926 x 7548 microns, Area = 44.73 sq mm

AG-4 SnyderOT
Designer: Larry Snyder, Yale University,
via University of Washington
Description: A binary tree processor that computes boolean
functions, with inputs at the leaves and output at the root.
Reserved space = 3418 x 3430 microns, Area = 11.72 sq mm

AH-1 LhDocl
Designer: Lynn Conway
Description: This is the Left Half of a "document chip",
describing MPC79, for use on MPC79A wafers.
Reserved space = 2918 x 4688 microns, Area = 13.68 sq mm

BO-1 LhDoc2
This is the Left Half of the "document chip",
for use on MPC79B wafers.
Reserved space = 2918 x 4688 microns, Area = 13.68 sq mm

AH-2 RHDocl
Designer: Lynn Conway
Description: This is the Right Half of a "document chip",
flowcharting MPC79, for use on MPC79A wafers.
Reserved space = 3548 x 4424 microns, Area = 15.70 sq mm

BO-2 RHDoc2
This is the Right Half of the "document chip",
for use on MPC79B wafers.
Reserved space = 3548 x 4424 microns, Area = 15.70 sq mm