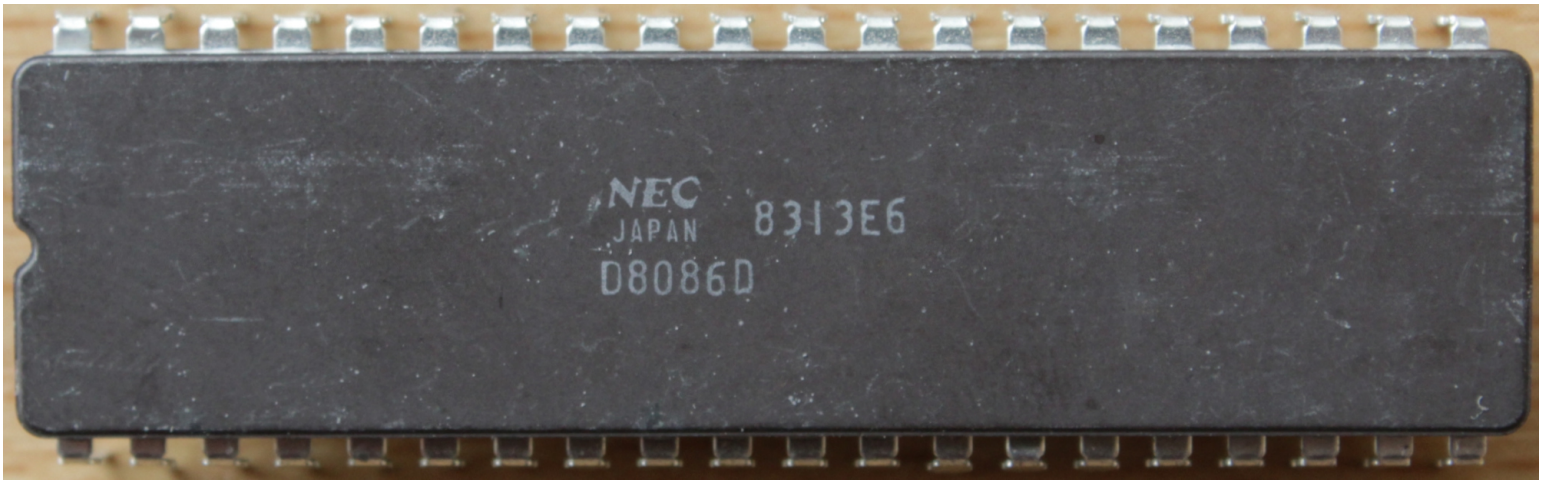
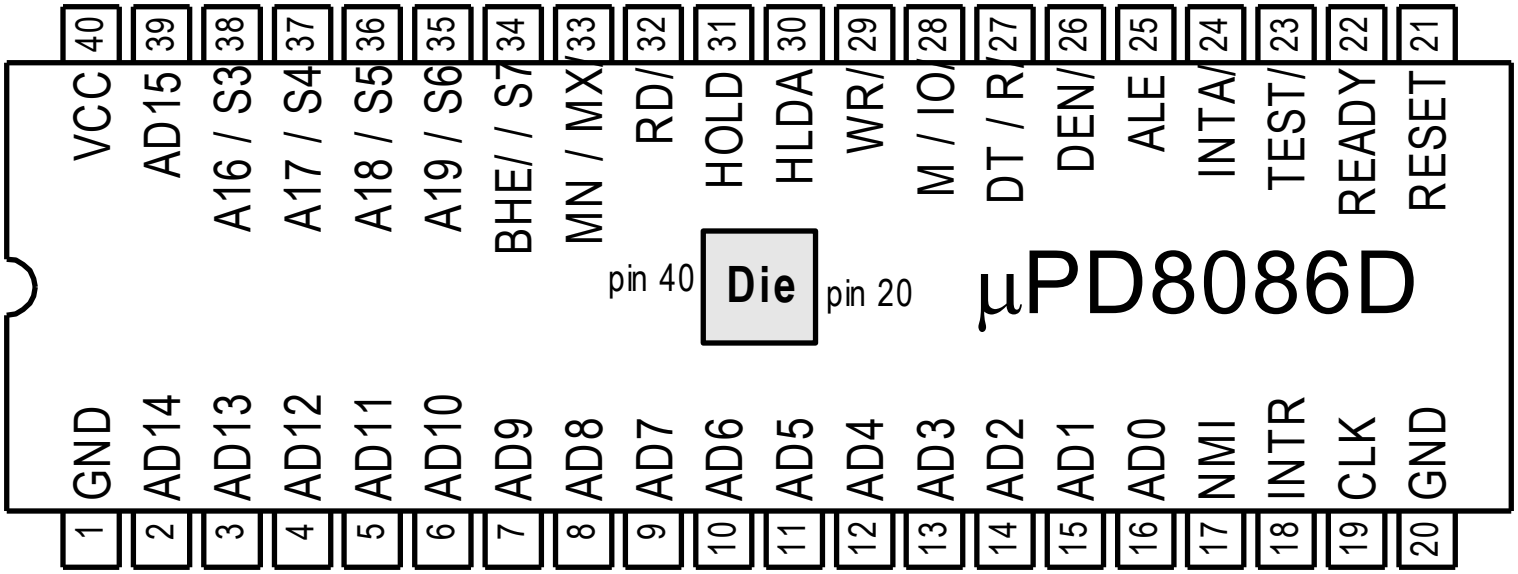



Pin association of next page die photo exactly reflects the die position mounted on the island of the base ribbon.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 12 1d | 25 2d | 38 3d | 51 4d | 64 5d | 77 6d | 90 7d | 103 8d |
| 11 1c | 24 2c | 37 3c | 50 4c | 63 5c | 76 6c | 89 7c | 102 8c |
| 10 1b | 23 2b | 36 3b | 49 4b | 62 5b | 75 6b | 88 7b | 101 8b |
| 9 1a | 22 2a | 35 3a | 48 4a | 61 5a | 74 6a | 87 7a | 100 8a |
| 8 19 | 21 29 | 34 39 | 47 49 | 60 59 | 73 69 | 86 79 | 99 89 |
| 7 18 | 20 28 | 33 38 | 46 48 | 59 58 | 72 68 | 85 78 | 98 88 |
| 6 17 | 19 27 | 32 37 | 45 47 | 58 57 | 71 67 | 84 77 | 97 87 |
| 5 16 | 18 26 | 31 36 | 44 46 | 57 56 | 70 66 | 83 76 | 96 86 |
| 4 15 | 17 25 | 30 35 | 43 45 | 56 55 | 69 65 | 82 75 | 95 85 |
| 3 14 | 16 24 | 29 34 | 42 44 | 55 54 | 68 64 | 81 74 | 94 84 |
| 2 13 | 15 23 | 28 33 | 41 43 | 54 53 | 67 63 | 80 73 | 93 83 |
| 1 12 | 14 22 | 27 32 | 40 42 | 53 52 | 66 62 | 79 72 | 92 82 |
| 0 11 | 13 21 | 26 31 | 39 41 | 52 51 | 65 61 | 78 71 | 91 81 |

Hugin Stack# vs. Coordinate
(18 MP x 104 (8 x 13) Sectional Photos)

**Micrograph Library**

I am introducing total 25 die micrographs I made.

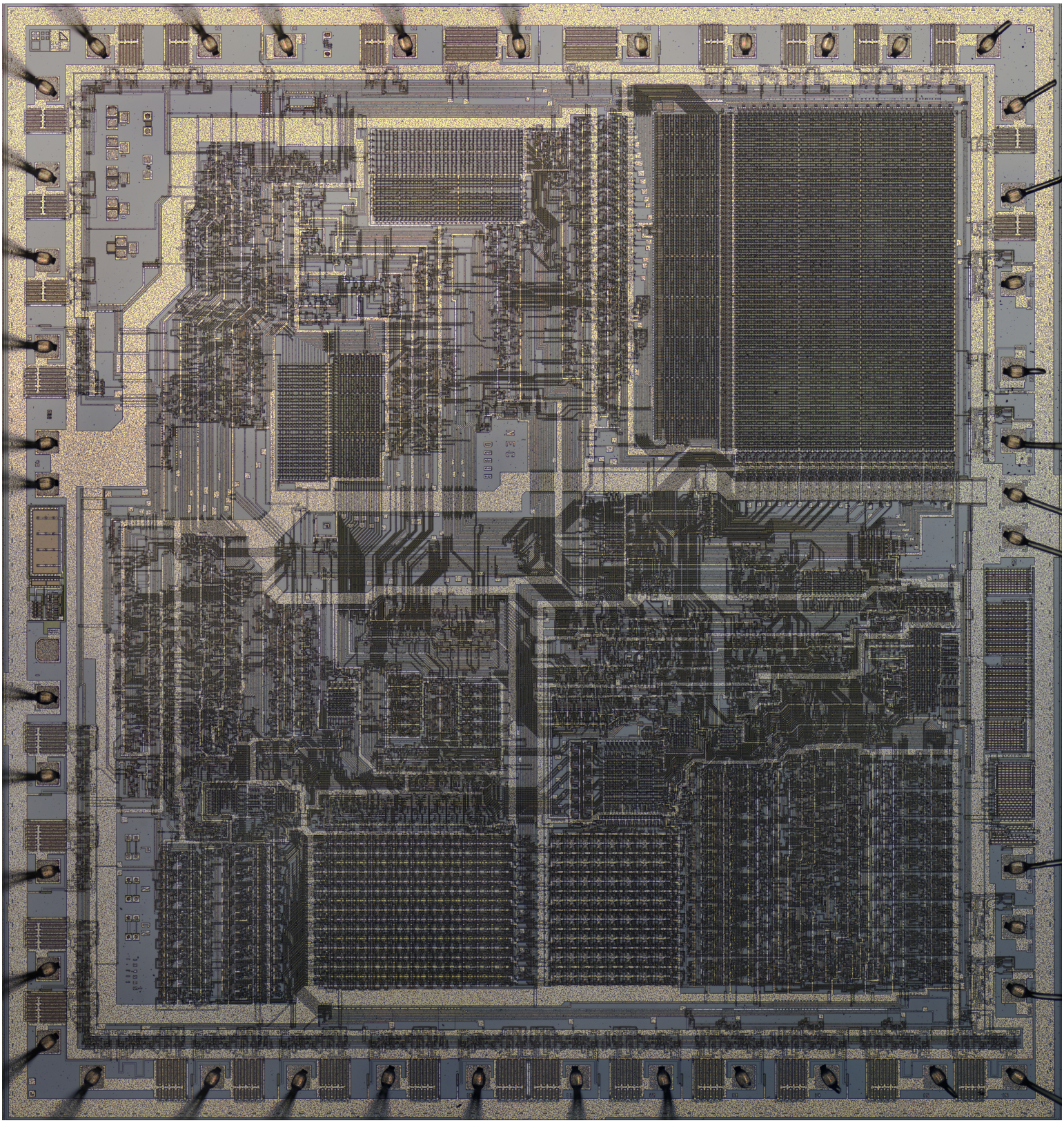
When zooming die micrograph using a smart phone or tablet, you possibly experience limited maximum available zoom factor (up to 2x), slow zooming speed, and sometimes freeze because of the factors such as slow CPU, insufficient main memory capacity, and simplified PDF viewer installed.

I recommend using a desk-top PC with large monitor TV (40”), fast CPU (i7), big capacity of main memory (32/16 GB), and fast GPU (8 GB) if possible.

| Design company | Manufacturing company | Product name | Function |
|---|---|---|---|
| NEC | | μPD282D | 12 Digit Desk-top Calculator (ALU, Registers, etc. ) <Tetsuji Oguchi> |
| | | μPD941C | Single-chip 8 Digit 0 memory Desk-top Calculator <Tetsuji Oguchi> |
| | | μPD946C | Single-chip 8 Digit 1 memory Desk-top Calculator |
| | | μPD1201C | Single-chip 12 Digit 1 memory Desk-top Calculator with Printer Control <Tetsuji Oguchi> |
| | | μPD777D | Single-chip Television Game Processor <Tetsuji Oguchi & Toshio Oura> |
| | | μPD777C | |
| | | μPD7220AD | Graphics Display Controller (GDC) <Tetsuji Oguchi> |
| NEC | Intel | iD82720 | Graphics Display Controller (GDC)<br>- License manufacturing (Second source) of μPD7220 |
| NEC | | μPD72120L | Advanced Graphics Display Controller (AGDC) <Tetsuji Oguchi, et al.> |
| | | μPD765C | Floppy Disk Controller {NEC Fuchu Peripheral Equipment Division} |
| | | μPD7720AD | Signal Processor {NEC Central Research} |
| | | μPD277 | Single-chip 8 Digit 1 memory Desk-top Calculator <Toshio Oura> |
| Casio | NEC | μPD977 | Single-chip 8 Digit 1 memory Desk-top Calculator |
| | | μPD871B | Digital watch |
| | | μPD873G | |
| Intel | | 8080A | 8 bit Microprocessor |
| | | 8085A | |
| | | iD8086 | 16 bit Microprocessor |
| Intel | NEC | μPD8086D | 16 bit Microprocessor<br>- Reverse engineering of iD8086 |
| | Oki | 80C86A | 16 bit Microprocessor<br>- License manufacturing (Second source) of iD8086 |
| Zilog | | 84C00 | 8 bit Microprocessor (Z80) |
| Nintendo | Ricoh | RP2C02 | Television Game Processor (Family Computer with RP2A03) |
| Motorola | Ricoh | RP2A03 | 8 bit Microprocessor<br>- Reverse engineering of Motorola 6800 |
| | Motorola | 68000 | 16 bit Microprocessor (Apple Macintosh) |
| TI | | TMS9918A | Television Game Processor (Multiple chips) |

{}; Architectural design by
<>; Architectural & Logic design by

Downloadable Files



µPD8086D 20x 13000 x 13688 (178MP) 6400% (64x) Tolerant Synthesized by Hugin