μPD777C — pin 42 | Die | pin 21

Pin	Name		Pin	Name
42	CLK		1	K1/
41	VDD		2	K2/
40	NC		3	K3/
39	NC		4	K4/
38	NC		5	K5/
37	PD1		6	K6/
36	PD2		7	NC
35	PD3		8	NC
34	PD4		9	NC
33	GP/		10	K7/
32	GP&SW		11	R-Y
31	CH1		12	REF
30	CH2		13	B-Y
29	CH3		14	CROMA
28	CH6		15	VIDEO
27	CH4		16	R(I-3)
26	S4/		17	G(I-2)
25	S3/		18	REV
24	S2/		19	SOUND
23	S1/		20	AC/
22	NC		21	GND

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

13 1e	27 2e	41 3e	55 4e	69 5e	83 6e	97 7e	111 8e	125 9e
12 1d	26 2d	40 3d	54 4d	68 5d	82 6d	96 7d	110 8d	124 9d
11 1c	25 2c	39 3c	53 4c	67 5c	81 6c	95 7c	109 8c	123 9c
10 1b	24 2b	38 3b	52 4b	66 5b	80 6b	94 7b	108 8b	122 9b
9 1a	23 2a	37 3a	51 4a	65 5a	79 6a	93 7a	107 8a	121 9a
8 19	22 29	36 39	50 49	64 59	78 69	92 79	106 89	120 99
7 18	21 28	35 38	49 48	63 58	77 68	91 78	105 88	119 98
6 17	20 27	34 37	48 47	62 57	76 67	90 77	104 87	118 97
5 16	19 26	33 36	47 46	61 56	75 66	89 76	103 86	117 96
4 15	18 25	32 35	46 45	60 55	74 65	88 75	102 85	116 95
3 14	17 24	31 34	45 44	59 54	73 64	87 74	101 84	115 94
2 13	16 23	30 33	44 43	58 53	72 63	86 73	100 83	114 93
1 12	15 22	29 32	43 42	57 52	71 62	85 72	99 82	113 92
0 11	14 21	28 31	42 41	56 51	70 61	84 71	98 81	112 91
Hugin Stack# vs. Coordinate (18 MP x 126 (9 x 14) 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) - 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 - Reverse engineering of iD8086
	Oki	80C86A	16 bit Microprocessor - 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 - 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
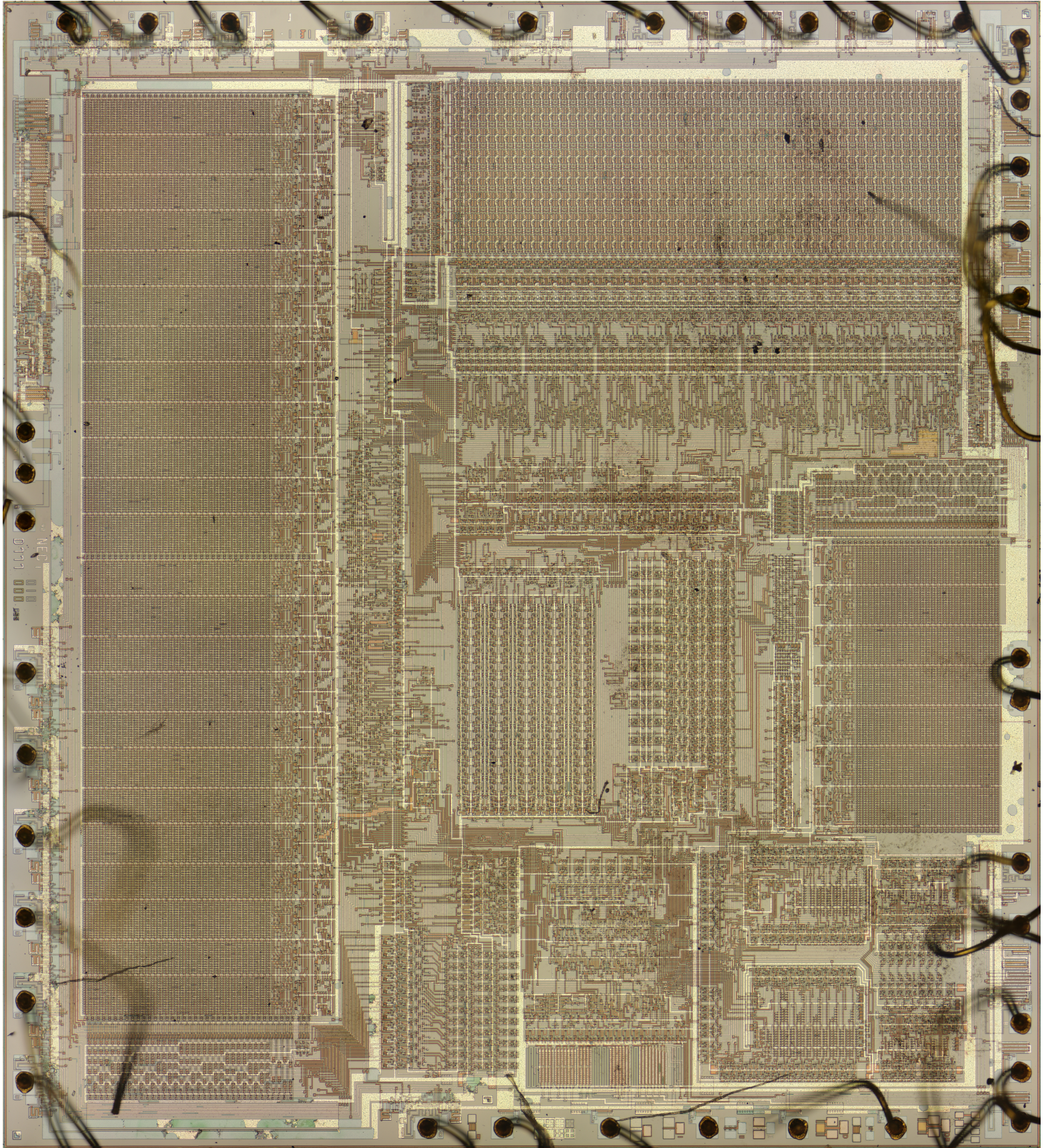
µPD777C 20x Die Photo 13000 x 14386 (187 MP) 6400% (64x) Tolerant Synthesized by Hugin