

OVERVIEW

Facts & Data
Micro & Mini Computers
Designed by
VUVT Zilina,
Czechoslovakia (now Slovak Republic)

A. Family of 16-bit Real-Time Computers

1. RPP 16 M

- data path	16 bits
- address path	16 bits
- number of instructions	62
- time of ADD exe	6 800 ns
- FP SP instructions	none
- max. memory capacity	16 KW
- type of memory	core
- memory access time	800 ns
- memory check	parity
- developed by	VUVT Zilina
- end of development at	1973 table form 1977 19" rack form
- SW compatible with	RPP 16 S
- manufactured by	TESLA Orava, Namestovo plant
- start of manufacturing	1974 table form 1978 19" rack form

2. RPP 16 S

- data path	16 bits
- address path	16 bits
- number of instructions	78
- time of ADD exe	4 000 ns
- FP SP instructions	yes
- max. memory capacity	64 KW
- type of memory	core
- memory access time	800 ns
- memory check	parity
- developed by	VUVT Zilina
- end of development at	1973 table form 1977 19" rack form

- SW compatible with RPP 16 M
- manufactured by TESLA Orava, Namestovo plant
- start of manufacturing 1974 table form
1978 19" rack form

B. Family of 16-bit Mini & Micro Computers

1. SM 3-20 Mini Computer

- data path 16 bits
- memory address path 16 bits
- number of instructions 76
- time of ADD exe 3 300 ns
- max. memory capacity 64 KB
- type of memory core, semiconductor
- memory check parity
- developed by VUVT Zilina
- end of development at 1978
- SW compatible with PDP 11/04
- manufactured by ZVT Namestovo
- start of manufacturing 1980

2. SM 4-20 Mini Computer

- data path 16 bits
- memory address path 18 bits
- number of instructions 132
- time of ADD exe 2 300 ns
- FP S/D P processor yes
- max. memory capacity 256 KB
- type of memory semiconductor
- memory check ECC
- designed by VUVT Zilina
- end of development at 1979
- SW compatible with PDP 11/34A
- manufactured by ZVT Namestovo
- start of manufacturing 1980

3. SM 50/50-1 Micro Computer

- data path 16 bits
- memory address path 16(18) bits
- number of instructions 86
- time of ADD exe 2 400 ns (without cache)
- cache memory (2 KB)

- max. memory capacity 64(256) KB
- type of memory semiconductor
- memory check parity
- developed by VUVT Zilina
- end of development at 1980
- SW compatible with PDP 11/34
- manufactured by ZVT Námestovo
- start of manufacturing 1982

4. SM 52/11 Mini Computer

- data path 16 bits
- memory address path 18 bits
- number of instructions 132 (+ customer designed)
- time of ADD exe 340 ns
- FP S/D P processor yes
- DCS yes
- WCS yes
- ECS yes
- cache memory 2 KB
- max. memory capacity 256 KB
- type of memory semiconductor
- memory check ECC
- developed by VUVT Zilina
- end of development at 1980
- SW compatible with PDP 11/60
- manufactured by ZVT Namestovo
- start of manufacturing 1982

5. SM 52/11+ Mini Computer

- data path 16 bits
- memory address path 22 bits
- number of instructions 198
- time of ADD exe 340 ns
- FP S/D P processor yes
- CIS yes
- WCS yes
- DCS yes
- ECS yes
- cache memory 2 KB
- max. memory capacity 4 MB
- type of memory semiconductor
- memory check ECC
- developed by VUVT Zilina

- end of development at 1983
- SW compatible with PDP 11/60 + PDP 11/44
- manufactured by ZVT Namestovo
- start of manufacturing 1984

6. M 16-22 Micro Computer

- data path 16 bits
- memory address path 22 bits
- number of instructions 132(+66)
- time of ADD exe 2 300 ns (without cache)
- FP S/D P processor yes
- CIS no (yes)
- ECS yes
- cache memory no(2 KB)
- max. memory capacity 4 MB
- memory check parity (ECC)
- developed by VUVT Zilina
- end of development at 1985
- SW compatible with (PDP 11/44)
- manufactured by ZVT Namestovo
- start of manufacturing 1987

C. Virtual memory 32-bit Mini Computer

1. 32-bit Mini Computer SM 52/12

- data path 32 bits
- memory address path 30 bits
- number of instructions 243
- FP S/D P processor yes
- virtual memory size 4 GB
- cache memory 8 KB
- number of memory subsystems 2
- max. memory capacity 8 MB (32 MB)
- memory check ECC
- number of I/O subsystems 4
- developed by VUVT Zilina
- end of development at 1984
- SW compatible with VAX 11/780
- manufactured by ZVT
- start of production 1986 (1985 at VUVT Zilina)

D. Family of 8-bit & 16-bit Micro Computers

1. 8-bit Micro Computer SM 50/40-1.

- data path 8 bits
- memory address path 16 bits
- microprocessor MHB 8080A
- FP procesor additional board
- max. memory capacity 64 KB
- costruction
 - set of more than 16 functional boards
 - cassette for 5 boards with power supply & cooling
 - IT with external floppy
 - MVS 80 (microcomputer development system with in-circuit emulator & PROM programmer with external paper tape or floppy)
- developed by VUVT Zilina
- end of development at 1980
- SW compatible with SBC 80/20, MDS II
- manufactured by ZVT
- start of production 1982

2. 16 bit Micro Computer M 16-1

- data path 16 bits
- memory address path 20 bits
- microprocessor 8086
- FP processor 8087
- max. memory capacity 1 MB
- construction
 - set of functional boards
 - cassette for 5 boards with power supply& cooling
 - IT with floppy or hard disk
 - MVS 86 (microcomputer development system with in-circuit emulator & PROM prograner with floppy or hard disk)
- developed by VUVT Zilina
- end of development at 1985
- SW compatible with SBC 86/12, MDS III
- manufactured by ZVT
- start of production 1987

E. Family of Personal Computers

1. PP 01

- Type of processor	MHB 8080A
- RAM size	48 KB
- EPROM size	10 (16) KB
- Monitor raster size-symbols	32 x 32
-points	256 x 256
-External memory	tape recorder
- Expansion	-
- End of development at	1984
- Start of production	1985

2. PP 02

- Type of processor	MHB 8080A (+SM 50/40-1)
- RAM size	64 KB(+64KB)
- EPROM size	10 (16) KB
- FPP	board
- Monitor raster size-symbols	32 x 32
-points	256 x 256
- External memory	floppy 2 x 160 KB (5,25“)
- Expansion	8 standard boards
- Monitor	external
- End of development at	1984
- Start of production	1985

3. PP 03

- Type of processor	SM 50/40-1
- RAM size	48 KB
- EPROM size	16 KB
- FPP	board
- Monitor raster size-symbols	64 x 32/16
-points	512 x 256
- External memory	floppy 2 x 160 KB (5,25“)
- Monitor	built in
- Expansion	6 standard boards
- End of development at	1984
- Start of production	1985

4. PP 04

- Type of processor	M 16-22
- RAM size	(128 KB) 256 KB
- FPP	board
- Monitor raster size-symbols	64 x 32/ (80 x 24)
- points	384 x 256
- External memory	floppy 1MB (8“)
- Expansion	4 standard boards
- Monitor	external
- End of development at	1985
- Start of production	1986

5. PP 05

- Type of processor	M 16-1
- RAM size	128 KB(256 KB)
- FPP	8087
- Monitor raster size-symbols	64 x 32/16
-points	512 x 256
- External memory	2 x 160 KB (5,25“)
- Monitor	built in
- Expansion	5 standard boards
- End of development at	1985
- Start of production	1986

6. PP 06

- Type of processor	8088
- RAM size	128 KB (640 KB)
- FPP	8087
- Monitor raster size-symbols	80 x 24
-points	640 x 200(480)
- External memory	2 x 160 KB (5,25“), (HDD 5,25“)
- SW compatible	IBM PC (XT)
- End of development at	1985
- Start of production	1986

()..... optional or added later

FP SP - floating point single precision

FP S/D P floating point single/double precision FPP - floating point processor

