

What processor is in the products?

Prof. William Fornaciari

Politecnico di Milano – Dipartimento di Elettronica e
Informazione

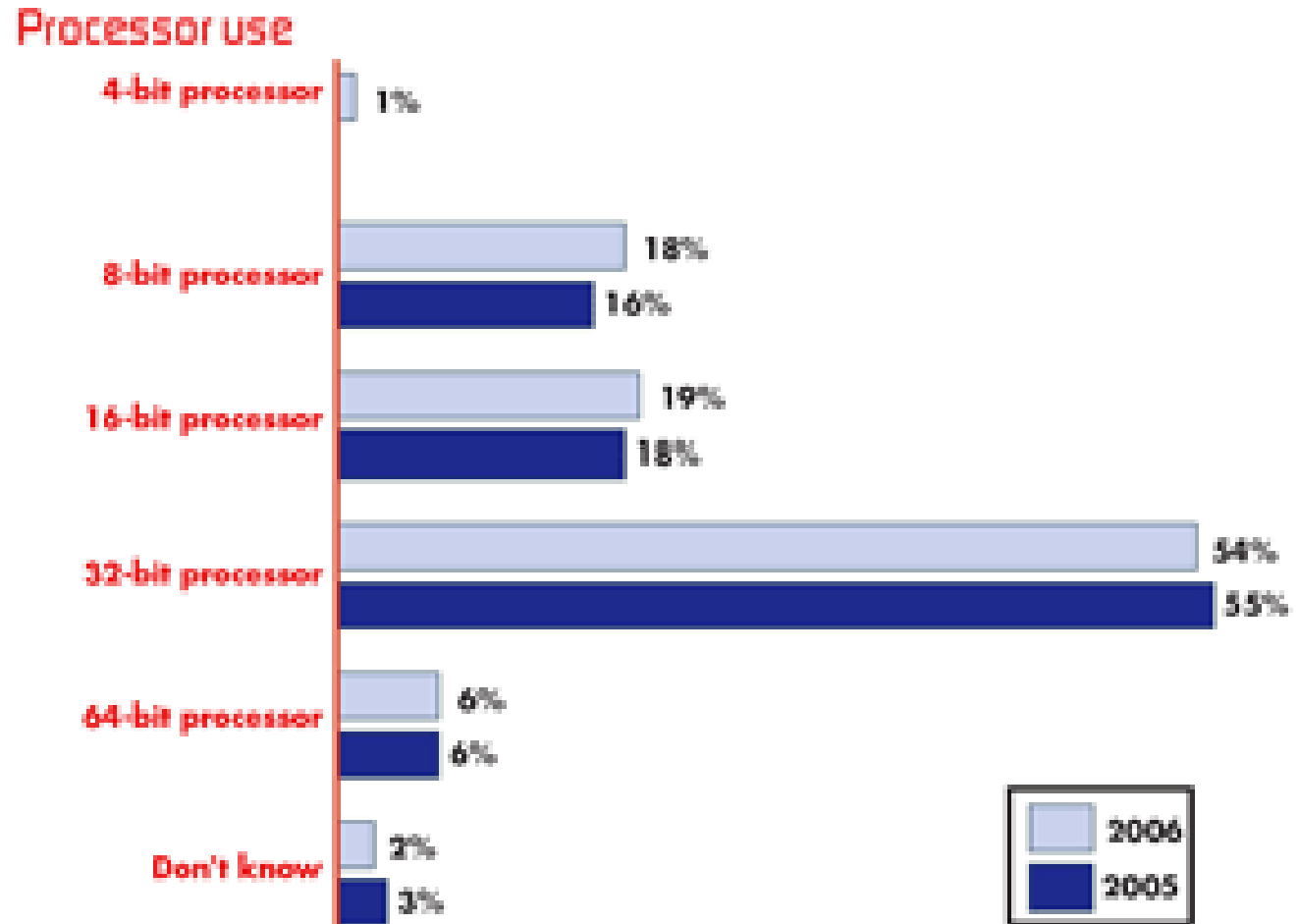
william.fornaciari@polimi.it

www.elet.polimi.it/~fornacia

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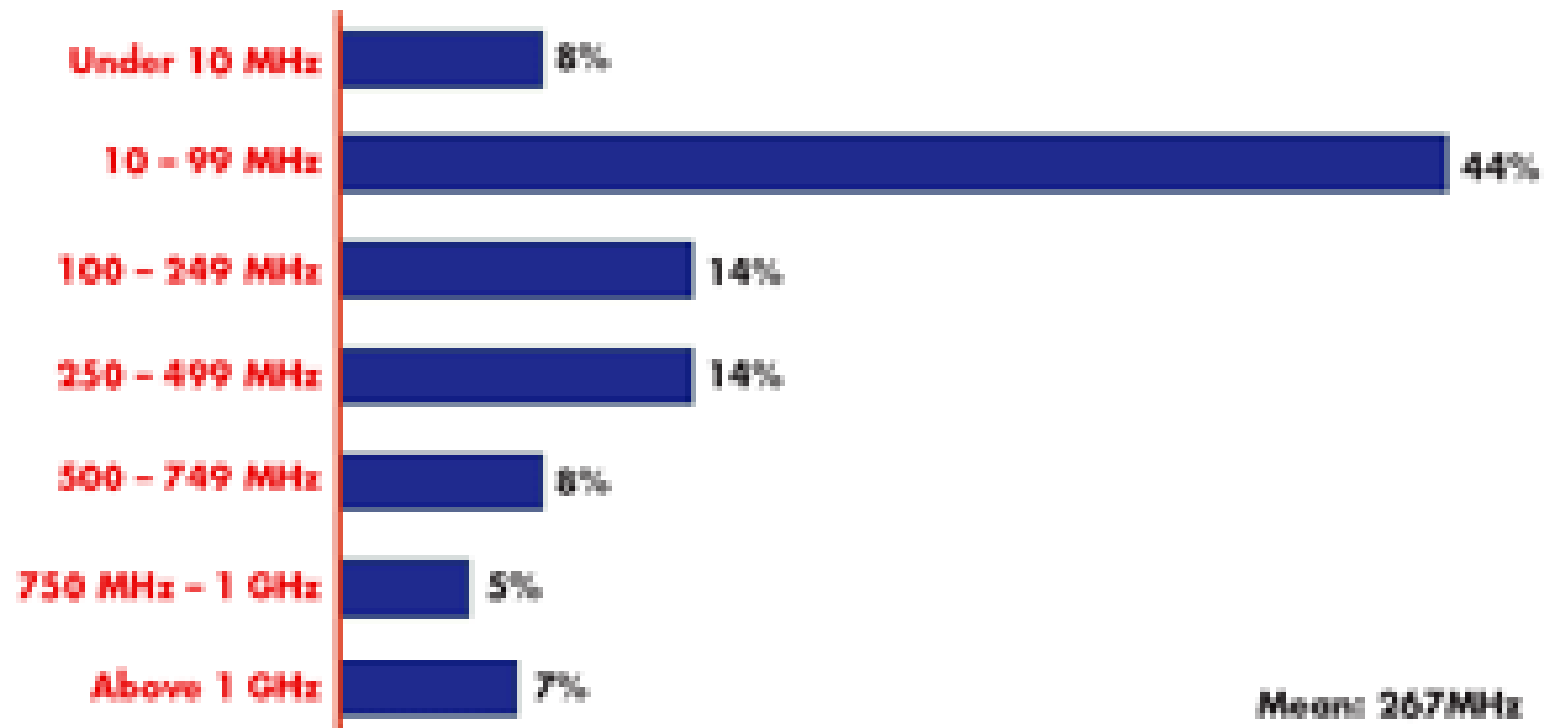
Number of bits

- Also the absolute values are changing, the world is becoming “embedded”



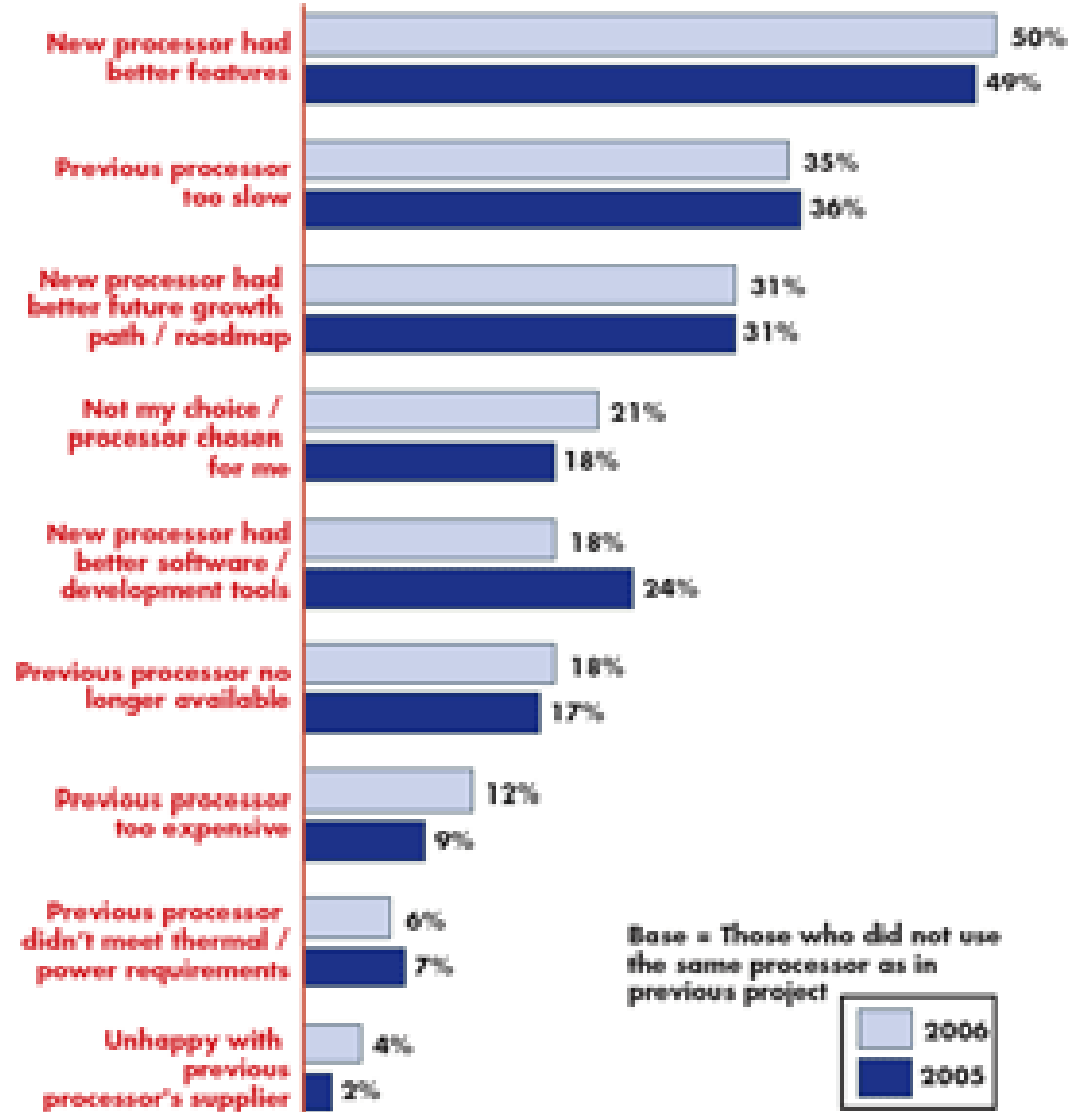
Clock rates as of 2006

Clock rates



Reasons for changing CPUs

Why we change CPUs



CPU selection criteria

Why we chose a CPU

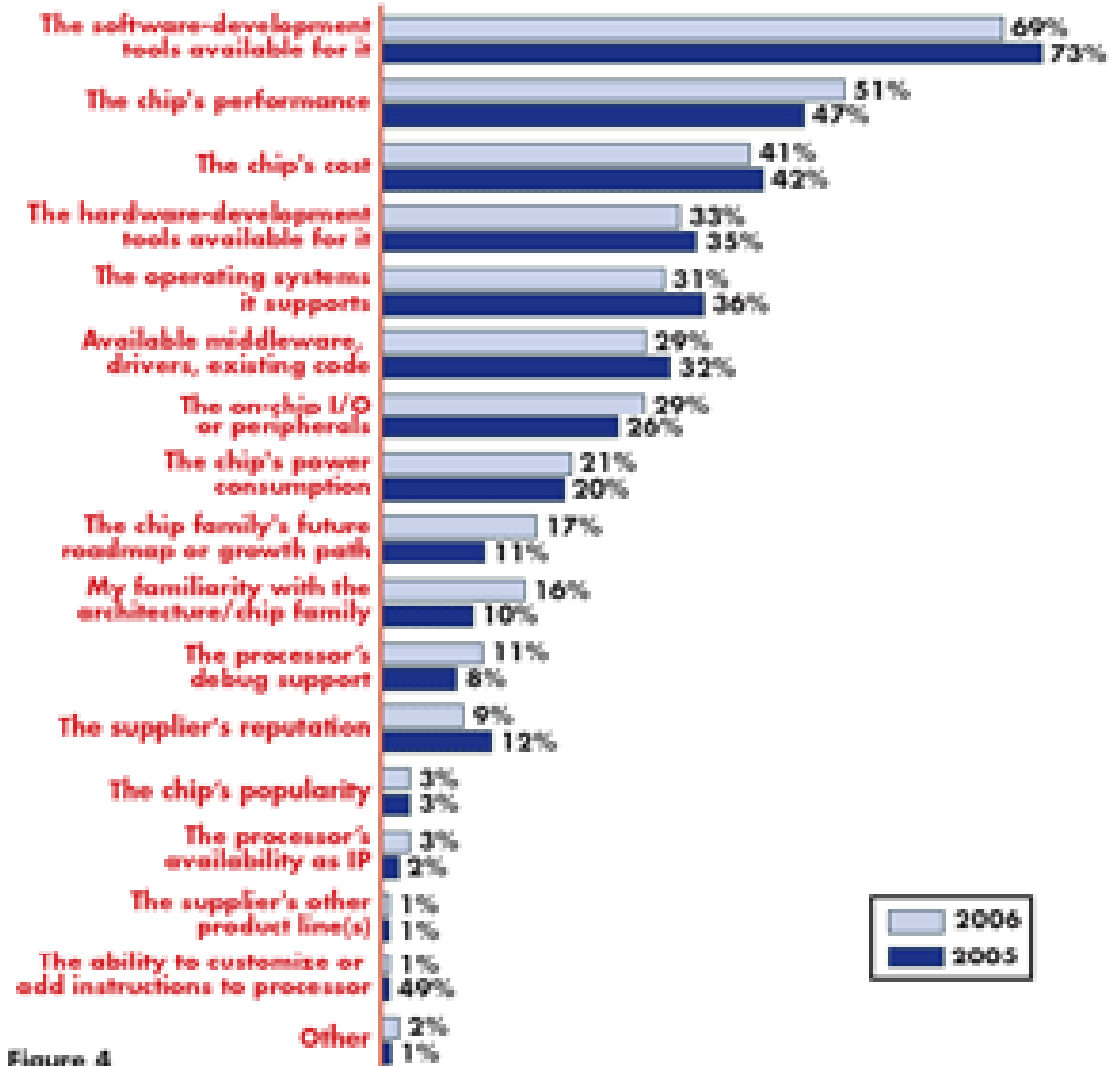


Figure 4

The woodland of suppliers – plan for future projects

Likely suppliers of processors in future projects

Vendor	2006 %
Freescale/Motorola	47
Intel	33
Texas Instruments	33
Microchip	28
Atmel	23
AMD	20
Xilinx	19
Analog Devices	16
Philips	15
IBM	12
Altera	11
ST Micro	10
National Semiconductor	10
NEC	9
Zilog	9
Cypress	9
Renesas	8
Infineon	8
Rabbit Semiconductor	8
Dallas Semi	8
Actel	8
Maxim	8
Silicon Labs	6
LSI Logic	6
Toshiba	6
Fujitsu	6
Cirrus Logic	5
Samsung	5

Cygnal	5
AMCC	5
Sharp	5
Transmeta	4
Agere	3
IDT	3
PMC-Sierra	3
Stretch	2
Cradle	2
Ubicom	2
Hyperstone	2
Raza Microelectronics	2
Clearspeed	2
Holtek	2
P.A. Semi	2

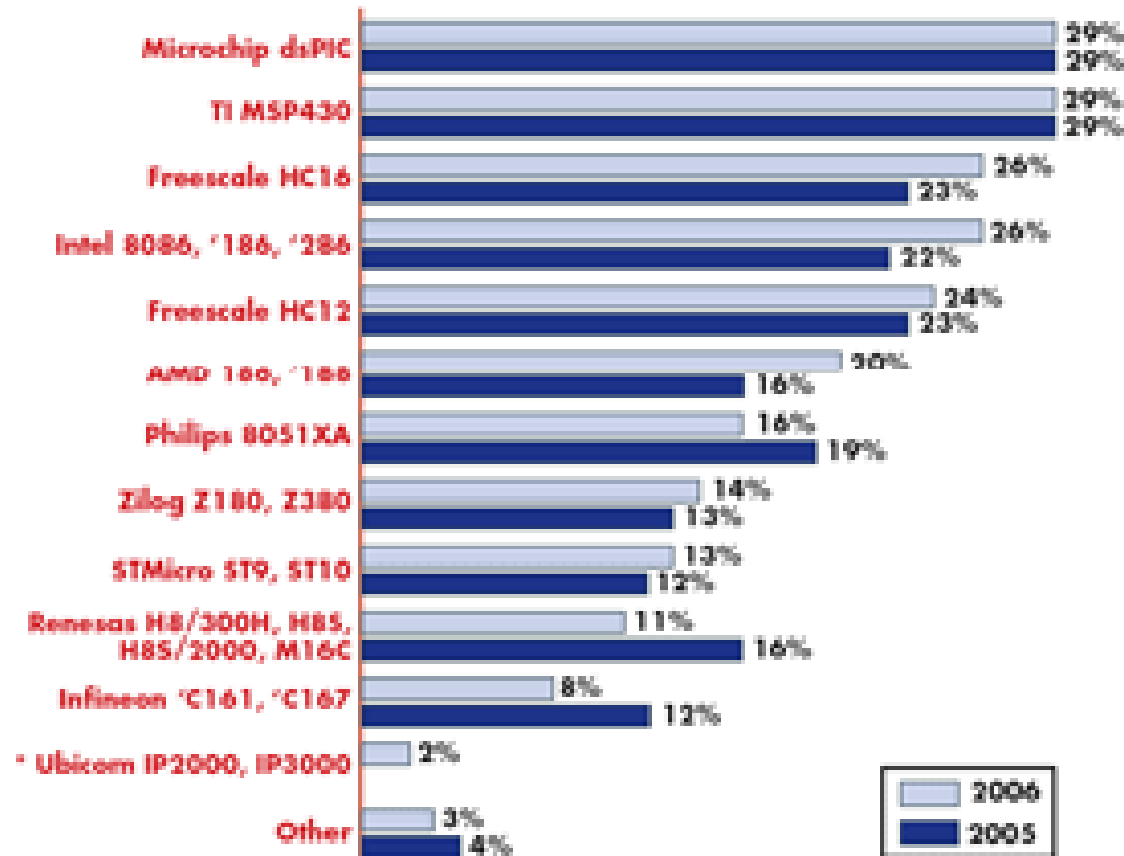
The small world – plan for next projects

8-bit parts for next project

Vendor	2006	2005
	%	%
Atmel AVR	32	33
Microchip PIC 18	30	31
Freescale HC05, HC08, HC11	27	25
Microchip PIC 14/16	26	28
Intel 80xx, '251	21	22
Microchip PIC 10/12	17	21
Zilog Z8, Z80, Z180, eZ80	16	19
Microchip PIC 17	15	18
Atmel 80xx	13	16
TI TMS370, 7000	13	14
STMicro ST6, ST7, ST8	12	11
Xilinx PicoBlaze	12	14
Rabbit 2000, 3000	11	16
Dallas/Maxim 80xx	10	15
Philips P80x, P87x, P89x	10	11
Renesas	10	11
Cypress PSoC	9	11
Cygnal/SiLabs 80xx	8	11
NEC K0	5	5
Infineon C500	3	6
National COP8	3	4
Uvicom SX	1	5
Other	2	3

Midrange – plan for the next projects

16-bit parts for next project



* Indicates not asked in 2005

Powerful processors – plan for next prod.

32-bit parts for next project

Vendor	2006 %	2005 %
Intel '386, '486, Pentium, Celeron	31	34
AMD '386, '486, Athlon, Opteron, Geode	24	20
Intel PXA, IXP, XScale (ARM)	21	18
Atmel AT91xx (ARM)	20	-
Freescale PowerPC 5xx, 6xx,	20	16
Freescale PowerPC 7xx, 8xx	19	20
Freescale 68K, ColdFire	19	23
IBM PowerPC 4xx, 7xx	19	23
Xilinx MicroBlaze, PowerPC 405	18	19
Freescale PowerQUICC	16	16
Freescale DragonBall MX (ARM)	13	15
Altera Nios, Nios II	10	13
Intel Itanium	10	9
AMD Alchemy (MIPS)	9	8
Cirrus Logic EP73xx, EP93xx (ARM)	8	-
Actel ProASIC 3 (ARM)	7	-
Renesas SuperH, H8SX, M32C, M32R	7	9
STMicro ST20	7	7
AMCC PowerPC 4xx	5	7
SPARC (any)	4	5
Transmeta (x86)	4	6
Fujitsu FR series	3	4
IDT 32xxx	2	-
P.A. Semi 13xx, 16xx (PowerPC)	2	-
Other	5	6

What CPU(s) have been in your (company's) embedded designs during the past two years? The next two? – as of 2006

Embedded processor preference trends

