

Comparison of CPU Speeds (UWM - 1D - Single Precision)

Computer Brand: M&A; RAM: 128MB PC133; BUS Speed: 133MHZ;

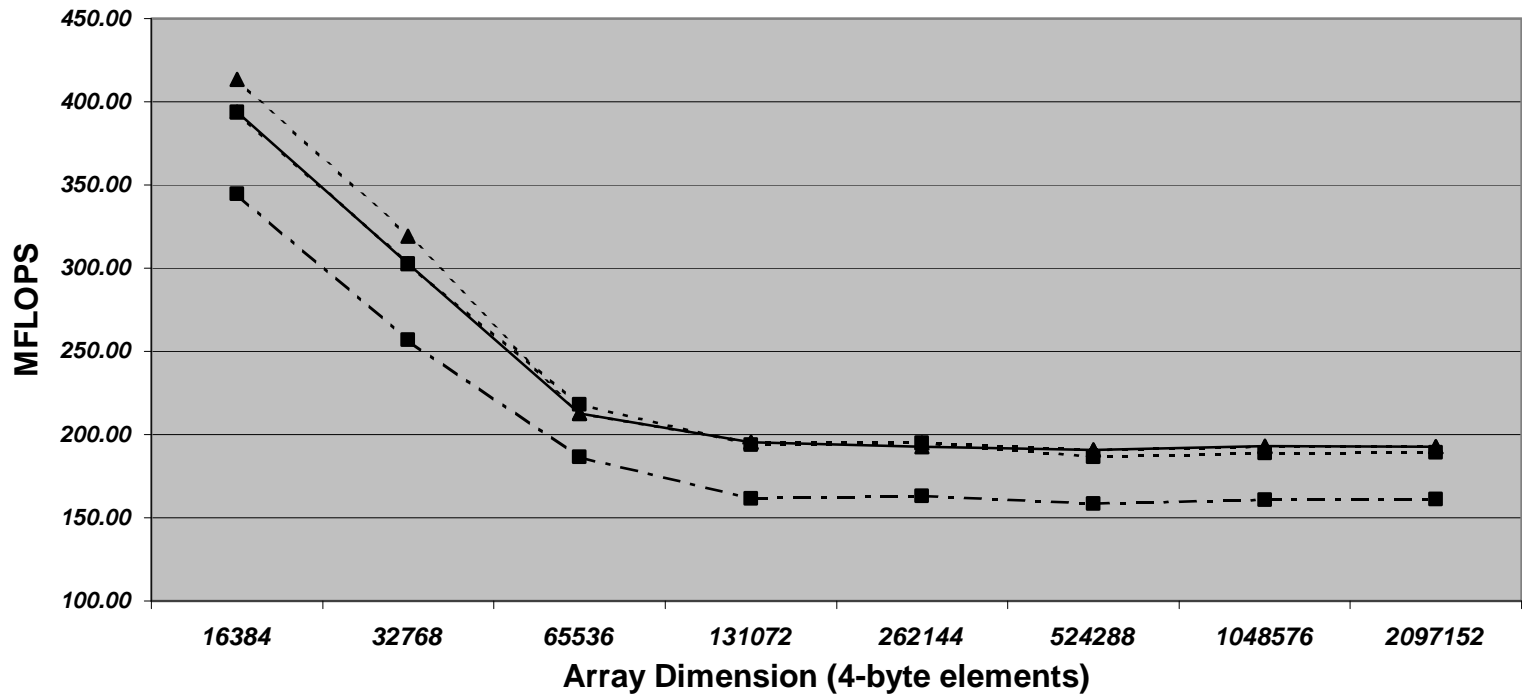
HD Type: Fujitsi 10.0 GB EIDE Ultra-DMA/66 3.5LP 5400RPM Single Platter (2 Heads) ATA-5 Interface;

OS: RedHat Linux Release 6.2; Kernel 2.2.14-5.0; with no modifications;

CPU TYPE		Intel PIII 800EBMHz		Intel PIII 800EB		Intel PIII 800EB		Intel PIII 800EB		Intel 800MHz		Intel PIII 733MHZ	
CPU CLOCK		Intel 800EB Gigabyte		Intel800EB Asus- CUV4X		Intel 800EB Asus CUSL2- 815E		Intel 800EB Intel 815E		Intel 800 Asus CUSL2- 815E		Intel 733 Intel 815E	
L1 CACHE		16KB Data, 16KB Instr		16KB Data, 16KB Instr		16KB Data, 16KB Instr		16KB Data, 16KB Instr		16KB Data, 16KB Instr		16KB Data, 16KB Instr	
L2 CACHE		256KB full-speed Gigabyte		256KB full-speed Asus-CUV4X		256KB full-speed Asus-CUSL2-815E		256KB full-speed Intel D815E		256KB full-speed Asus CUSL2-815E		256KB full-speed Intel D815E	
MOTHERBOARD		Gigabyte		Asus-CUV4X		Asus-CUSL2-815E		Intel D815E		Asus CUSL2-815E		Intel D815E	
N, Array Dimension	n, # of FFTs	T, Total Time, Secs	MFLOPS	T, Total Time, Secs	MFLOPS	T, Total Time, Secs	MFLOPS	T, Total Time, Secs	MFLOPS	T, Total Time, Secs	MFLOPS	T, Total Time, Secs	MFLOPS
16384	126	0.23	359.51	0.21	393.75	0.20	413.44	0.21	393.75	0.23	359.51	0.24	344.53
32768	84	0.46	256.79	0.39	302.88	0.37	319.26	0.39	302.88	0.41	288.11	0.46	256.79
65536	56	1.00	168.00	0.79	212.66	0.79	212.66	0.77	218.18	0.82	204.88	0.90	186.67
131072	38	1.75	138.43	1.24	195.36	1.24	195.36	1.25	193.80	1.39	174.28	1.50	161.50
262144	26	2.52	139.29	1.82	192.86	1.80	195.00	1.8	195.00	2.01	174.63	2.15	163.26
524288	18	3.74	137.17	2.69	190.71	2.69	190.71	2.75	186.55	2.99	171.57	3.24	158.33
1048576	12	5.17	139.26	3.73	193.03	3.74	192.51	3.81	188.98	4.15	173.49	4.48	160.71
2097152	8	7.26	138.84	5.23	192.73	5.23	192.73	5.33	189.12	5.77	174.70	6.25	161.28

$$\text{MFLOPS} = 3 * n * N * \text{LOG}_2(N) / (T * 1024 * 1024)$$

FFTW(UWM) -1D -Single Precision

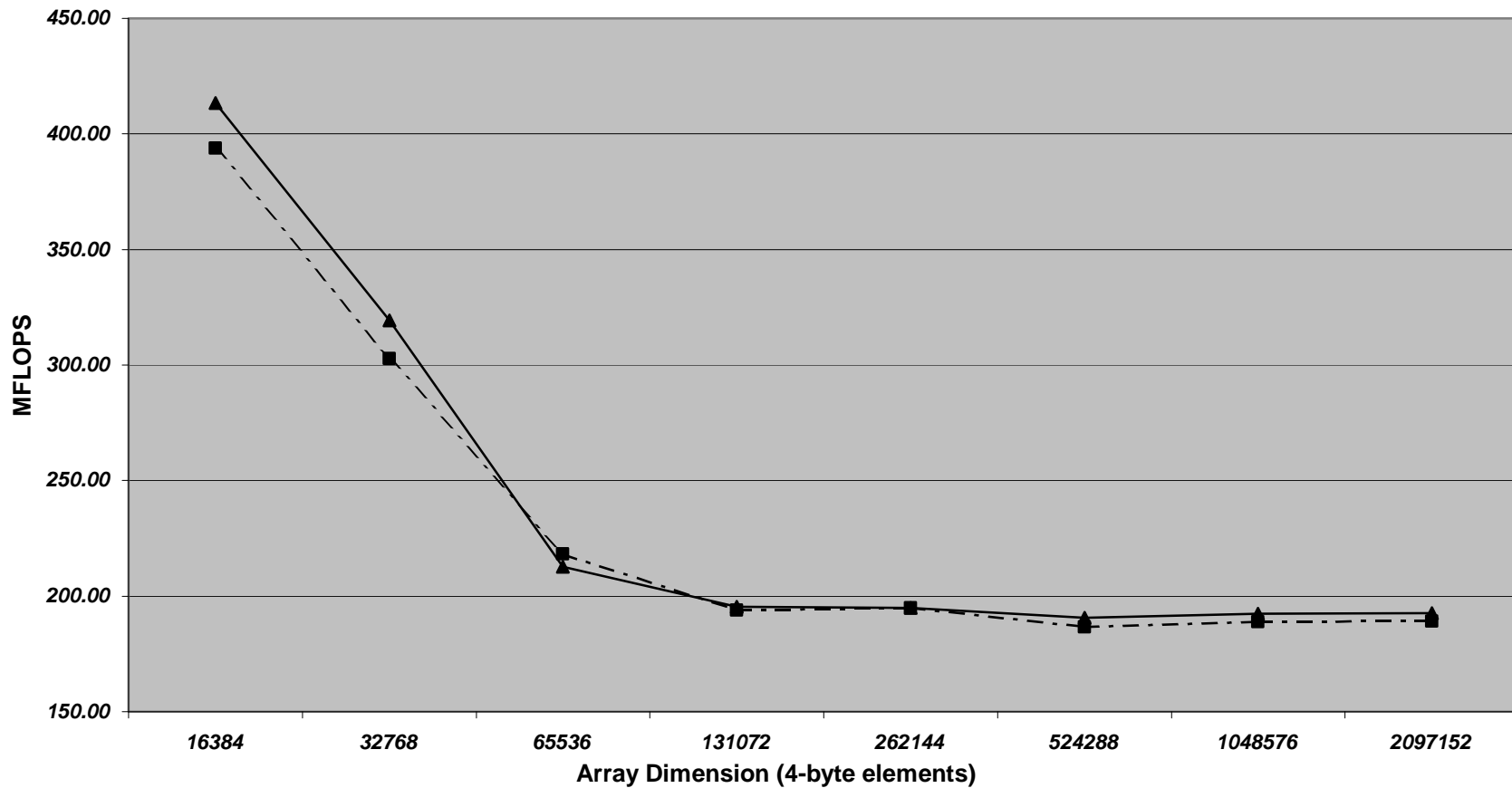


Legend:

- Intel800EB Asus-CUV4X (Solid line with triangle markers)
- Intel 800EB Asus CUSL2-815E (Dashed line with triangle markers)
- Intel 800EB Intel 815E (Dotted line with square markers)
- Intel 733 Intel 815E (Dash-dot line with square markers)

FFTW(UWM) -1D -Single Precision

ASUS CUSL2-815E vs. Intel D815E

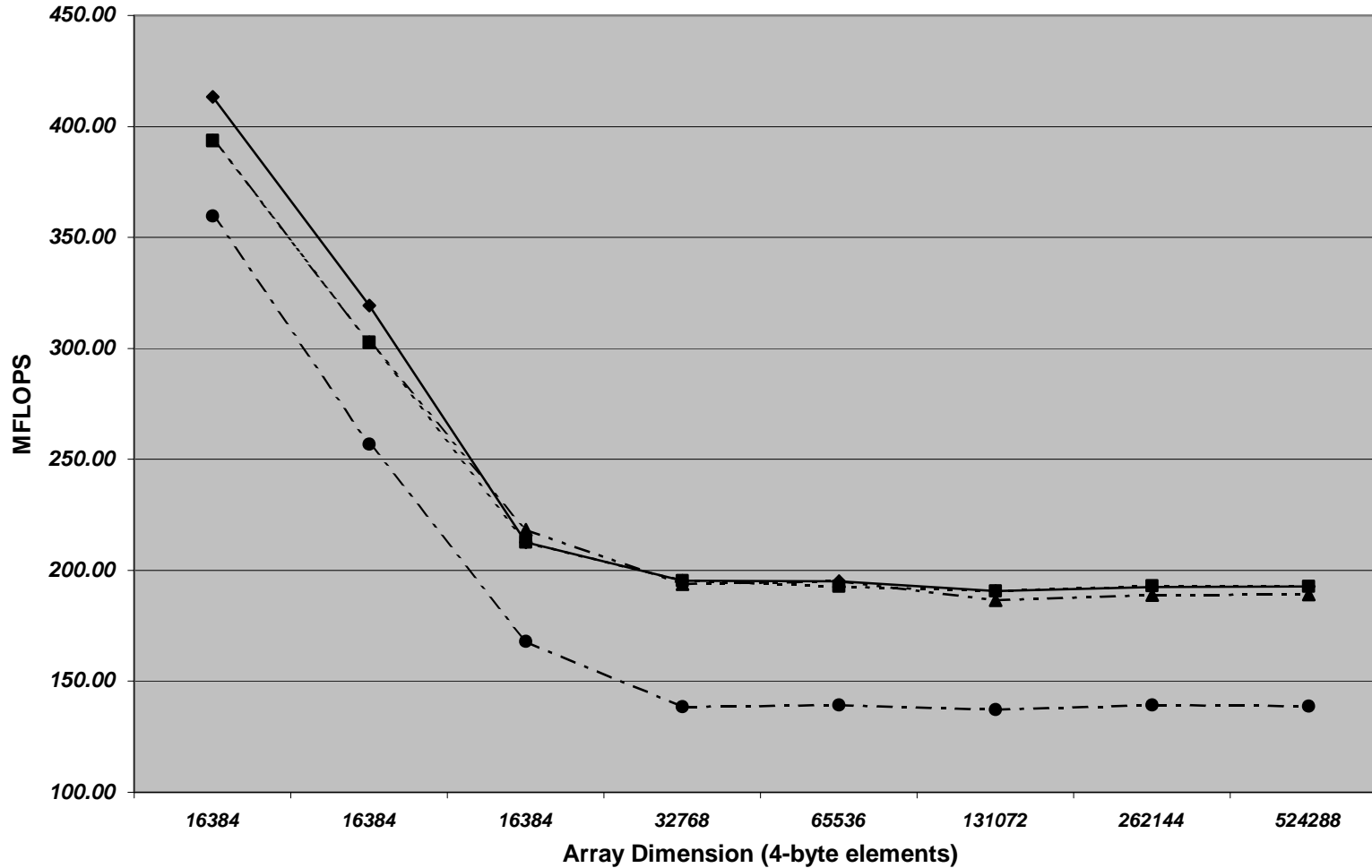


—▲— Intel 800EB
Asus CUSL2-815E

-■- Intel 800EB
Intel 815E

FFT(UWM) -1D -Single Precision

Intel PIII 800MHz-EB

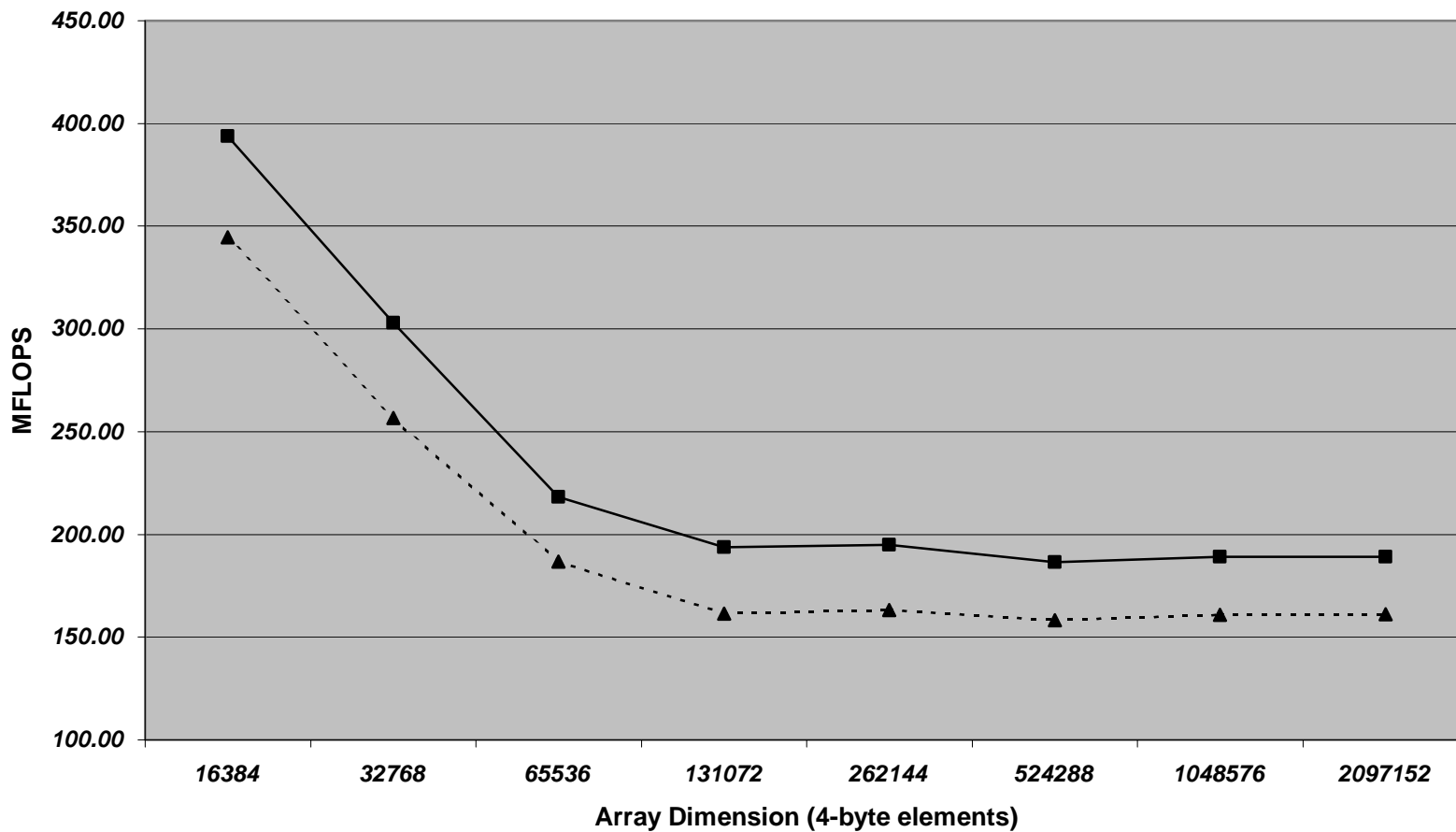


Legend:

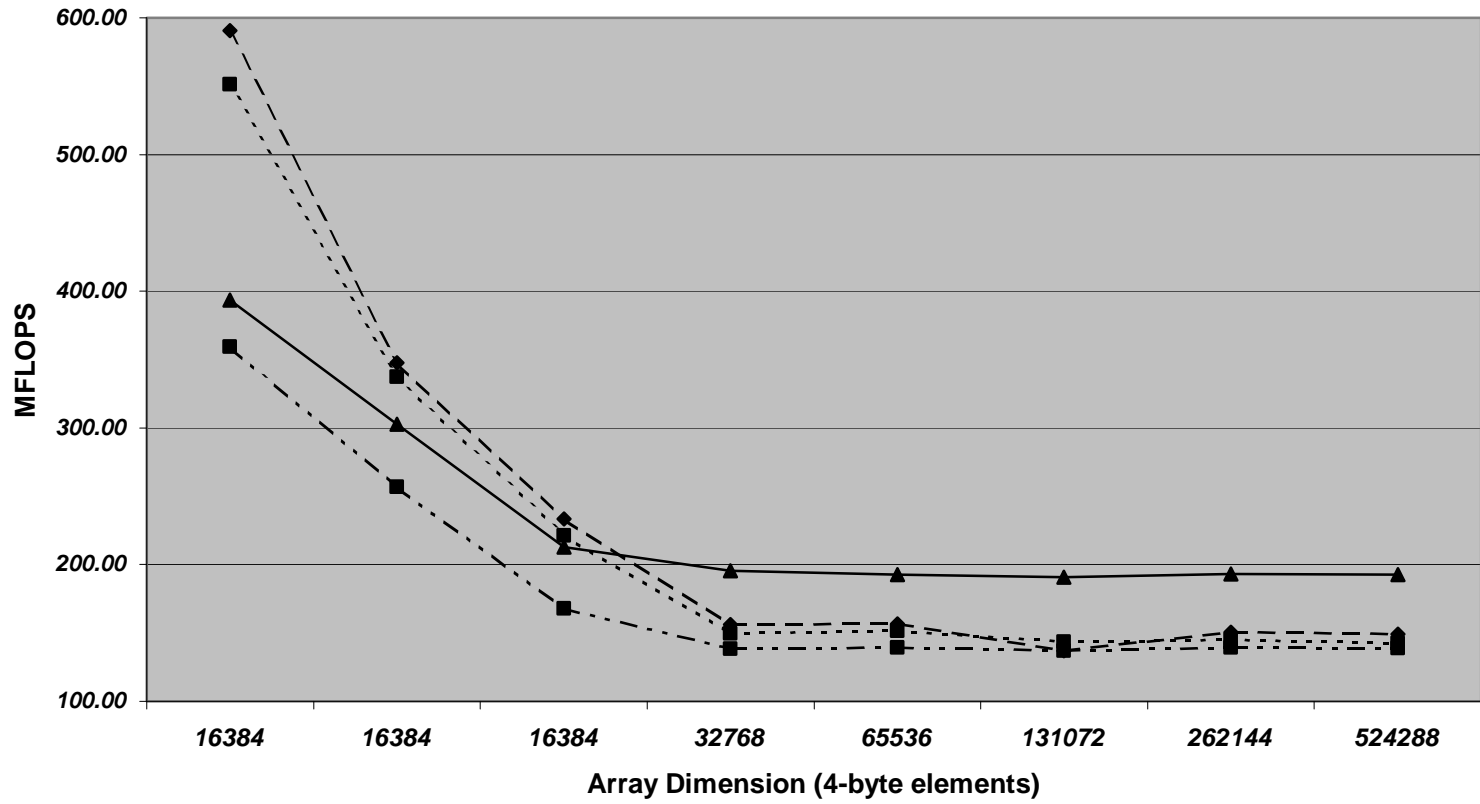
- Intel 800EB Gigabyte
- Intel800EB Asus-CUV4X
- ◆--- Intel 800EB Asus CUSL2-815E
- ▲--- Intel 800EB Intel 815E

FFT(UWM) -1D -Single Precision

Motherboard: Intel D815E



FFT(UWM) -1D -Single Precision



--■-- Intel 800EB Gigabyte —▲— Intel 800EB Asus-CUV4X ...■... AMD 900 Gigabyte -◆- AMD 900 Asus A7V