

M7 End-to-End Processing Delay

12/4/2008

	9.6 kbps	16 kbps	32 kbps	64 kbps	128 kbps	256 kbps	512 kbps
Viterbi, Rate 1/2	18.3 ms	11.1 ms	5.6 ms	2.8 ms	1.4 ms	0.7 ms	0.3 ms
Viterbi, Rate 1/2 + RS-308	410.1 ms	246.1 ms	123.1 ms	61.5 ms	30.8 ms	15.4 ms	7.7 ms
Viterbi, Rate 1/2 + RS-309	706.9 ms	424.3 ms	212.1 ms	106.1 ms	53.1 ms	26.5 ms	13.3 ms
Viterbi, Rate 1/2 + RS-CT	703.5 ms	422.2 ms	211.1 ms	105.5 ms	52.8 ms	26.4 ms	13.2 ms
Viterbi, Rate 3/4	30.2 ms	18.1 ms	9.1 ms	4.5 ms	2.3 ms	1.1 ms	0.6 ms
Viterbi, Rate 3/4 + RS-308	419.2 ms	251.5 ms	125.7 ms	62.9 ms	31.4 ms	15.7 ms	7.9 ms
Viterbi, Rate 3/4 + RS-309	718.3 ms	431.0 ms	215.5 ms	107.8 ms	53.9 ms	27.0 ms	13.5 ms
Viterbi, Rate 3/4 + RS-CT	714.4 ms	428.7 ms	214.4 ms	107.2 ms	53.6 ms	26.8 ms	13.4 ms
Viterbi, Rate 5/6	30.9 ms	18.3 ms	9.2 ms	4.6 ms	2.3 ms	1.2 ms	0.6 ms
Viterbi, Rate 5/6 + RS-308	419.6 ms	251.8 ms	125.8 ms	63.0 ms	31.5 ms	15.8 ms	7.9 ms
Viterbi, Rate 5/6 + RS-309	718.8 ms	431.2 ms	215.6 ms	107.8 ms	53.9 ms	27.0 ms	13.5 ms
Viterbi, Rate 5/6 + RS-CT	715.1 ms	429.0 ms	214.5 ms	107.3 ms	53.7 ms	26.8 ms	13.4 ms
Viterbi, Rate 7/8	31.1 ms	18.6 ms	9.2 ms	4.7 ms	2.3 ms	1.2 ms	0.6 ms
Viterbi, Rate 7/8 + RS-308	420.0 ms	251.9 ms	126.0 ms	63.0 ms	31.5 ms	15.8 ms	7.9 ms
Viterbi, Rate 7/8 + RS-309	719.1 ms	431.4 ms	215.7 ms	107.8 ms	53.9 ms	27.0 ms	13.5 ms
Viterbi, Rate 7/8 + RS-CT	715.2 ms	429.2 ms	214.6 ms	107.4 ms	53.7 ms	26.9 ms	13.4 ms
TCM, Rate 2/3	50.3 ms	30.2 ms	15.1 ms	7.5 ms	3.8 ms	1.9 ms	0.9 ms
TCM, Rate 2/3 + RS-310	736.9 ms	442.3 ms	221.2 ms	110.6 ms	55.3 ms	27.7 ms	13.8 ms
TCM, Rate 2/3 + RS-CT	733.4 ms	440.0 ms	220.0 ms	110.0 ms	55.0 ms	27.5 ms	13.8 ms
TPC Advanced, Rate 0.453-16k	1034.2 ms	620.8 ms	310.6 ms	155.6 ms	78.1 ms	39.3 ms	19.9 ms
TPC Advanced, Rate 1/2-16k	599.2 ms	359.8 ms	180.2 ms	90.4 ms	45.5 ms	23.1 ms	11.9 ms
TPC Advanced, Rate 1/2-4k	283.8 ms	170.2 ms	85.2 ms	42.7 ms	21.4 ms	10.8 ms	5.5 ms
TPC Advanced, Rate 3/4-16k	1418.6 ms	851.5 ms	426.1 ms	213.5 ms	107.1 ms	53.9 ms	27.3 ms
TPC Advanced, Rate 3/4-4k	306.4 ms	183.8 ms	92.1 ms	46.1 ms	23.2 ms	11.7 ms	6.0 ms
TPC Advanced, Rate 7/8-16k	1603.7 ms	962.5 ms	481.6 ms	241.2 ms	120.9 ms	60.8 ms	30.7 ms
TPC Advanced, Rate 7/8-4k	391.4 ms	235.0 ms	117.5 ms	58.9 ms	29.6 ms	14.9 ms	7.6 ms
TPC Advanced, Rate 0.922-16k	1611.4 ms	967.3 ms	483.9 ms	242.3 ms	121.5 ms	61.1 ms	30.9 ms
TPC Advanced, Rate 0.950-4k	431.3 ms	259.0 ms	129.6 ms	64.9 ms	32.6 ms	16.4 ms	8.3 ms

TPC CT, Rate 5/16	173.4 ms	104.0 ms	52.1 ms	26.1 ms	13.2 ms	6.7 ms	3.4 ms
TPC CT, Rate 21/44	243.0 ms	145.9 ms	73.0 ms	36.6 ms	18.4 ms	9.3 ms	4.7 ms
TPC CT, Rate 3/4	276.5 ms	166.0 ms	83.0 ms	41.6 ms	20.9 ms	10.5 ms	5.3 ms
TPC CT, Rate 7/8	1595.9 ms	957.7 ms	479.1 ms	239.8 ms	120.1 ms	60.3 ms	30.4 ms
TPC CT, Rate 0.95	423.7 ms	254.5 ms	127.3 ms	63.8 ms	32.0 ms	16.1 ms	8.2 ms
LDPC, Rate 1/2 & 256 Block	47.0 ms	28.3 ms	14.2 ms	7.2 ms	3.7 ms	1.9 ms	1.0 ms
LDPC, Rate 1/2 & 512 Block	87.8 ms	52.8 ms	26.5 ms	13.4 ms	6.8 ms	3.5 ms	1.8 ms
LDPC, Rate 1/2 & 1k Block	167.1 ms	100.3 ms	50.3 ms	25.3 ms	12.8 ms	6.6 ms	3.4 ms
LDPC, Rate 1/2 & 2k Block	327.9 ms	196.9 ms	98.8 ms	49.6 ms	25.1 ms	12.8 ms	6.7 ms
LDPC, Rate 1/2 & 4k Block	647.3 ms	388.9 ms	194.9 ms	98.0 ms	49.5 ms	25.2 ms	13.1 ms
LDPC, Rate 1/2 & 8k Block	1289.0 ms	774.2 ms	388.1 ms	195.0 ms	98.5 ms	50.2 ms	26.1 ms
LDPC, Rate 1/2 & 16k Block	2569.7 ms	1543.3 ms	773.5 ms	388.6 ms	196.2 ms	100.0 ms	51.9 ms
LDPC, Rate 2/3 & 256 Block	43.4 ms	26.3 ms	13.2 ms	6.7 ms	3.4 ms	1.8 ms	1.0 ms
LDPC, Rate 2/3 & 512 Block	80.1 ms	48.3 ms	24.2 ms	12.2 ms	6.2 ms	3.2 ms	1.7 ms
LDPC, Rate 2/3 & 1k Block	150.2 ms	90.3 ms	45.3 ms	22.8 ms	11.6 ms	5.9 ms	3.1 ms
LDPC, Rate 2/3 & 2k Block	292.4 ms	175.7 ms	88.1 ms	44.4 ms	22.5 ms	11.5 ms	6.0 ms
LDPC, Rate 2/3 & 4k Block	577.9 ms	347.1 ms	174.1 ms	87.5 ms	44.3 ms	22.6 ms	11.8 ms
LDPC, Rate 2/3 & 8k Block	1147.2 ms	689.1 ms	345.4 ms	173.7 ms	87.8 ms	44.9 ms	23.4 ms
LDPC, Rate 2/3 & 16k Block	2286.3 ms	1373.3 ms	688.5 ms	346.1 ms	175.0 ms	89.4 ms	46.5 ms
LDPC, Rate 3/4 & 256 Block	43.5 ms	25.9 ms	13.1 ms	6.7 ms	3.4 ms	1.8 ms	1.0 ms
LDPC, Rate 3/4 & 512 Block	75.6 ms	45.3 ms	22.8 ms	11.5 ms	5.9 ms	3.0 ms	1.6 ms
LDPC, Rate 3/4 & 1k Block	143.4 ms	86.1 ms	43.2 ms	21.8 ms	11.0 ms	5.7 ms	3.0 ms
LDPC, Rate 3/4 & 2k Block	276.0 ms	165.8 ms	83.1 ms	41.9 ms	21.2 ms	10.9 ms	5.7 ms
LDPC, Rate 3/4 & 4k Block	543.3 ms	326.4 ms	163.7 ms	82.4 ms	41.7 ms	21.4 ms	11.2 ms
LDPC, Rate 3/4 & 8k Block	1076.2 ms	646.5 ms	324.2 ms	163.1 ms	82.5 ms	42.2 ms	22.1 ms
LDPC, Rate 3/4 & 16k Block	2144.9 ms	1288.6 ms	646.2 ms	325.0 ms	164.4 ms	84.1 ms	43.9 ms
LDPC, Rate 14/17 & 256 Block	41.5 ms	25.0 ms	12.5 ms	6.3 ms	3.3 ms	1.7 ms	0.9 ms
LDPC, Rate 14/17 & 512 Block	72.7 ms	43.9 ms	22.0 ms	11.1 ms	5.7 ms	2.9 ms	1.6 ms
LDPC, Rate 14/17 & 1k Block	135.3 ms	81.4 ms	40.8 ms	20.6 ms	10.5 ms	5.4 ms	2.8 ms
LDPC, Rate 14/17 & 2k Block	260.8 ms	156.6 ms	78.6 ms	39.6 ms	20.1 ms	10.3 ms	5.4 ms
LDPC, Rate 14/17 & 4k Block	512.0 ms	307.4 ms	154.2 ms	77.6 ms	39.3 ms	20.2 ms	10.6 ms
LDPC, Rate 14/17 & 8k Block	1015.4 ms	609.9 ms	305.9 ms	153.9 ms	77.9 ms	39.9 ms	20.9 ms
LDPC, Rate 14/17 & 16k Block	2020.7 ms	1213.9 ms	608.8 ms	306.3 ms	155.0 ms	79.4 ms	41.6 ms

LDPC, Rate 7/8 & 256 Block	42.2 ms	25.3 ms	12.7 ms	6.5 ms	3.3 ms	1.7 ms	0.9 ms
LDPC, Rate 7/8 & 512 Block	70.8 ms	42.6 ms	21.5 ms	10.8 ms	5.5 ms	2.9 ms	1.5 ms
LDPC, Rate 7/8 & 1k Block	131.5 ms	79.1 ms	39.6 ms	20.0 ms	10.2 ms	5.2 ms	2.8 ms
LDPC, Rate 7/8 & 2k Block	250.5 ms	150.7 ms	75.5 ms	38.1 ms	19.3 ms	9.9 ms	5.2 ms
LDPC, Rate 7/8 & 4k Block	492.0 ms	295.5 ms	148.3 ms	74.6 ms	37.8 ms	19.4 ms	10.2 ms
LDPC, Rate 7/8 & 8k Block	971.4 ms	583.7 ms	292.7 ms	147.3 ms	74.7 ms	38.3 ms	20.1 ms
LDPC, Rate 7/8 & 16k Block	1936.2 ms	1163.1 ms	583.4 ms	293.6 ms	148.7 ms	76.3 ms	40.0 ms
LDPC, Rate 10/11 & 256 Block	40.4 ms	24.0 ms	12.2 ms	6.1 ms	3.2 ms	1.7 ms	0.9 ms
LDPC, Rate 10/11 & 512 Block	69.4 ms	41.6 ms	21.0 ms	10.6 ms	5.4 ms	2.8 ms	1.5 ms
LDPC, Rate 10/11 & 1k Block	127.4 ms	76.6 ms	38.4 ms	19.3 ms	9.9 ms	5.1 ms	2.7 ms
LDPC, Rate 10/11 & 2k Block	243.4 ms	146.3 ms	73.3 ms	37.0 ms	18.8 ms	9.7 ms	5.1 ms
LDPC, Rate 10/11 & 4k Block	476.2 ms	285.9 ms	143.5 ms	72.3 ms	36.6 ms	18.8 ms	9.9 ms
LDPC, Rate 10/11 & 8k Block	942.4 ms	566.3 ms	284.2 ms	143.0 ms	72.5 ms	37.2 ms	19.6 ms
LDPC, Rate 10/11 & 16k Block	1874.8 ms	1126.5 ms	565.2 ms	284.5 ms	144.1 ms	74.0 ms	38.9 ms
LDPC, Rate 16/17 & 256 Block	39.4 ms	23.8 ms	11.9 ms	6.1 ms	3.1 ms	1.6 ms	0.9 ms
LDPC, Rate 16/17 & 512 Block	66.7 ms	40.3 ms	20.2 ms	10.2 ms	5.2 ms	2.7 ms	1.4 ms
LDPC, Rate 16/17 & 1k Block	124.2 ms	74.4 ms	37.4 ms	18.9 ms	9.6 ms	5.0 ms	2.6 ms
LDPC, Rate 16/17 & 2k Block	236.1 ms	141.8 ms	71.2 ms	35.8 ms	18.2 ms	9.4 ms	5.0 ms
LDPC, Rate 16/17 & 4k Block	462.5 ms	277.8 ms	139.4 ms	70.2 ms	35.6 ms	18.3 ms	9.7 ms
LDPC, Rate 16/17 & 8k Block	914.2 ms	549.2 ms	275.6 ms	138.7 ms	70.3 ms	36.1 ms	19.0 ms
LDPC, Rate 16/17 & 16k Block	1819.6 ms	1093.2 ms	548.5 ms	276.1 ms	139.9 ms	71.8 ms	37.8 ms
No FEC, Diff Encoded BPSK	4.1 ms	3.2 ms	1.2 ms	0.6 ms	0.4 ms	0.2 ms	< 0.05 ms
No FEC, Diff Encoded QPSK	6.0 ms	4.2 ms	1.8 ms	0.9 ms	0.5 ms	0.3 ms	0.1 ms
No FEC, Diff Encoded OQPSK	6.5 ms	3.9 ms	2.3 ms	1.0 ms	0.5 ms	0.3 ms	0.1 ms
No FEC, Diff Encoded 8PSK	7.9 ms	4.7 ms	2.3 ms	1.2 ms	0.6 ms	0.3 ms	0.2 ms
No FEC, Diff Encoded 8QAM	7.9 ms	4.8 ms	2.3 ms	1.1 ms	0.6 ms	0.3 ms	0.1 ms
No FEC, Diff Encoded 16QAM	9.5 ms	5.6 ms	2.8 ms	1.4 ms	0.7 ms	0.4 ms	0.2 ms