

APPENDIX E

DTT Capacity (Estimated)

TYPE OF MODULATION (SYSTEM CODE)	CAPACITY (Mbps)	CODE RATE	MODULATION CARRIER	CODE	GUARD INTERVAL (GI)	
QPSK (Quadratic Phase Shift Keying) : A	4 Mbps to 10 Mbps (≈ 2 TV programs)	1/2	2k	A	7 usec (1/32)	
		2/3		B	14 usec (1/16)	
		3/4		C	28 usec (1/8)	
		5/6		D	56 msec (1/4)	
		7/8	E	28 usec (1/32)		
16-QAM (Quadratic Amplitude Modulation) : B	9 Mbps to 21 Mbps (≈ 4 TV programs)		8k	F	56 usec (1/16)	
				G	112 usec (1/8)	
				H	224 usec (1/4)	
64-QAM (Quadratic Amplitude Modulation) : C	14 Mbps to 31 Mbps (≈ 6 TV programs)					

Types of Video Program in the 19 Mbps (estimated based on MPEG2)

Video Program	Description
1 HDTV	Sport and high action
2 HDTV	Both film material
1 HDTV + 1 or 2 SDTV	Non action or sport
3 SDTV	High action and sport
6 SDTV	Film, news and operas