## **APPENDIX C**

## Standard Time-Division Multiplexing Rates

North American Digital Telephone Hierarchy (Plesiochronous Digital Hierarchy)

Rate Name	Data Rate	Nominal Voice Circuits	
Single circuit	64,000 bit/s	1	
T1 or DS1	1.544 Mbit/s	24	
T2 or DS2	6.312 Mbit/s	96	
T3 or DS3	44.736 Mbit/s	672	
*T3C or DS3C	90 Mbit/s	1,344	
*T4 or DS4	274 Mbit/s	4,032	

<sup>\*</sup>Obsolete (not used in new equipment)

## ITU/European Digital Telephone Hierarchy

Rate Name	Data Rate	Nominal Voice Circuits	
Single circuit	64,000 bit/s		
Level 1	2.048 Mbit/s	30	
Level 2	8.448 Mbit/s	120	
Level 3	34.3 Mbit/s	480	
Level 4	139 Mbit/s	1920	
*Level 5	565 Mbit/s	7680	

<sup>\*</sup>Obsolete (not used in new systems)

## SONET/Synchronous Digital Hierarchy (SDH)

SONET Rate Name	SDH Rate Name	Data Rate	Nominal Equivalent
OC-1/STS-1	_	51.84 Mbit/s	672 voice 1 T3
OC-3/STS-3	STM-1	155.52 Mbit/s	2016 voice 1 Level 4
OC-12/STS-12	STM-4	622.08 Mbit/s	8064 voice
OC-48/STS-48	STM-16	2.488 Gbit/s	32,256 voice
OC-192/STS-192	STM-64	9.953 Gbit/s (10 Gbit/s)	129,024 voice
OS-768/STS-768	STM-256	40 Gbit/s	516,096 voice