

Appendix D

List of Acronyms

Acronym	Definition
ACS	Attitude Control System
AFB	Air Force Base
AFOSR	Air Force Office of Scientific Research
AFS	Air Force Station
AFSPC	Air Force Space Command
AJ	Antijam
Al-Li	Aluminum/Lithium
ALEXIS	Array of Low-Energy X-ray Imaging Sensors
ALT	Anode Layer Thrusters
APS	Active Pixel Sensor
Ar	Argon
ASAT	Antisatellite
ASIC	Application-Specific Integrated Circuit
ASK	Accessible Stored Knowledge
ATM	Asynchronous Transfer Mode
ATR	Automatic Target Recognition
ATT	American Telephone and Telegraph
AU	Air University
BDA	Battle Damage Assessment
BIST	Built-In Self Test
BMDO	Ballistic Missile Defense Organization
C ³	Command, Control, and Communications
C ³ I	Command, Control, Communications, and Intelligence
CCD	Charge-Coupled Device
CDMA	Code Division Multiple Access
CdTe	Cadmium Telluride

CIS	Copper Indium Diselenide
CMOS	Complementary Metal Oxide Semiconductor
CONUS	Continental United States
CORBA	Common Object Request Broker Architecture
COTS	Commercial Off-The-Shelf
CsI	Cesium Iodide
CsTe	Cesium Telluride
DAMA	Demand-Assigned Multiple Access
DBS	Direct Broadcast Satellite
DC	Direct Current
DoD	Department of Defense
DoE	Department of Energy
DRAM	Dynamic Random Access Memory
DSCS	Defense Satellite Communications System
DSP	Digital Signal Processing
EELV	Evolved Expendable Launch Vehicle
EHF	Extremely High Frequency
EMFB	Electromechanical Flywheel Battery
EMP	Electromagnetic Pulse
EO	Electro-Optical
EP	Electric Propulsion
EW	Electronic Warfare
FAA	Federal Aviation Administration
FLTSAT	Fleet Satellite
FORTE	Fast On-Orbit Recording of Transient Events
FOV	Field Of View
FY	Fiscal Year
GaAs	Gallium Arsenide
GaInP ₂	Gallium Indium Phosphide
GaSb	Gallium Antimonide
Gbit	Gigabit

Gbps	Gigabit per Second
GEO	Geostationary Orbit
Gflop	Gigaflop
GHz	GigaHertz
GN&C	Guidance, Navigation, and Control
GPOW	Global Precision Optical Weapon
GPS	Global Positioning System
H ₂	Hydrogen
HEDM	High Energy Density Material
HEL	High Energy Laser
HF	High Frequency, or Hydrogen Fluoride
HLV	Heavy Launch Vehicle
IBC	Impurity Band Conduction
IBM	International Business Machines
ICBM	Intercontinental Ballistic Missile
IDA	Institute for Defense Analysis
IHPRPT	Integrated High-Payoff Rocket Propulsion Technology
InGaAs	Indium Gallium Arsenide
INMARSAT	International Maritime Satellite Organization
InSb	Indium Antinimide
IR	Infrared
IR&D	Independent Research and Development
I _{sp}	Specific Impulse
JPEG	Joint Photographic Experts Group
JPL	Jet Propulsion Laboratory
k	Kilo
K	Degrees Kelvin
kbit	Kilobit
Kbps	Kilobits Per Second
kg	Kilogram
KIPS	Kilo Instructions Per Second

KKV	Kinetic Kill Vehicle
Kr	Krypton
kW	KiloWatt
kWe	KiloWatt Electric
lb	Pound
LEASAT	Leased Satellite
LEO	Low Earth Orbit
LH ₂	Liquid Hydrogen
LOX	Liquid Oxygen
LPI	Low Probability of Intercept
LV	Launch Vehicle
LWIR	Long-Wavelength Infrared
MAP	Mission Area Plan
Mbps	Megabits Per Second
MCM	Multi-Chip Module
MCP	Microchannel Plate
MCT	Mercury Cadmium Telluride
MEMS	Microelectromechanical Systems
Mflop	Megaflop
MFS	Multifunctional Structure
MILSTAR	Military Strategic and Tactical Relay
MIPS	Million Instructions Per Second
MIT	Massachusetts Institute of Technology
MJ	Megajoule
MLV	Medium Launch Vehicle
MMH	Monomethyl Hydrazine
MMIC	Multi-Module Integrated Circuit
MOS	Metal Oxide Semiconductor
MOSFET	Metal Oxide Semiconductor Field Effect Transistor
MPA	Military Payload Assessment
MPD	Magnetoplasmadynamic

MPEG	Motion Pictures Experts Group
MRAM	Magnetoresistive RAM
MSE	Mobile Subscriber Equipment
MTI	Moving Target Indicator
MW	MegaWatt
NH ₃	Amonia
N ₂ H ₄	Hydrazine
N ₂ O ₄	Nitrogen Tetraoxide
NASA	National Aeronautics and Space Administration
NiH ₂	Nickel-Hydrogen
NRO	National Reconnaissance Office
PERS	Polycynate-Ester Resin Systems
PL	Phillips Laboratory
PPT	Pulsed Plasma Thruster
QWIP	Quantum Well Infrared Photodetector
RAM	Random Access Memory
RF	Radio Frequency
RFI	Radio Frequency Interference
RL	Rome Laboratory
RLV	Reusable Launch Vehicle
RTG	Radioisotope Thermionic Generator
S&T	Science and Technology
SAB	Scientific Advisory Board
SAR	Synthetic Aperture Radar
SAWAFE	Satellite Attack Warning and Assesment Flight Experiment
SECAF	Secretary of the Air Force
SDIO	Strategic Defense Initiative Organization
SHF	Super High Frequency
SIOP	Single Integrated Operations Plan
SMC	Space and Missiles Systems Center
SNL	Sandia National Laboratory

SOI	Silicon On Insulator
SPT	Stationary Plasma Thruster
SRAM	Static Random Access Memory
SSTO	Single Stage To Orbit
STS	Space Transportation System
TAOS	Technology for Autonomous Operational Survivability
TAV	Trans-Atmospheric Vehicle
TDM	Time-Domain Multiplexed
TDMA	Time Division Multiple Access
TENCAP	Technical Exploitation of National Capabilities
TICAS	Tactical Imaging Constellation and Architecture Study
TOA	Total Obligation Authority
TT&C	Telemetry, Tracking, and Control
TV	Television
UAV	Unmanned Air Vehicle
UHF	Ultra High Frequency
US	United States
USAF	United States Air Force
UV	Ultraviolet
VLSI	Very Large Scale Integration
Wh	Watt-Hour
Wh/kg	Watt-Hour per Kilogram
Xe	Xenon
μm	Micrometer