

## U.S. Department of Commerce Bureau of Industry and Security



CCL	Description	Applications	Dollar Value
ALBANIA			
0A984	Shotguns, Buckshot, Shotgun Shells	1	\$20,768
3E001	Technology for Dev or Prod of Certain Items in 3A/	1	\$1
4E001	Technology for Dev/Prod/Use of Certain Equip/Softw	1	\$1
5E001	Technology for Dev/Prod/Use, Etc, of Equip. in 5A0	1	\$1
	Total Applications: 2		
	Total CCL's: 4		
	Total Dollar Value: \$20,771		

CCL	Description	Applications	Dollar Value
ARMENIA			
0A984	Shotguns, Buckshot, Shotgun Shells	1	\$118,000
3D003	CAD Software for Semiconductor Devices/Integrated	1	\$0_
3E001	Technology for Dev or Prod of Certain Items on 3A/	21	\$21
5A002	Systems/Equipment/Integrated Circuits for Info Sec	1	\$3
5D002	Software for Information Security	1	\$3
5E002	Technology for Dev/Prod/Use of Information Securit	1	\$8
	Total Applications: 24		
	Total CCL's: 6		
	Total Dollar Value: \$118,035		

Appendix F: Approved Applications for Country Group D:1 and Cuba

CCL	Description	Applications	Dollar Value
AZERBA	IJAN		
0A982	Thumbcuffs, Leg Irons and Shackles	1	\$2,150
5A002	Systems/Equipment/Integrated Circuits for Info Sec	1	\$2,365
	Total Applications: 2		
	Total CCL's: 2		
	Total Dollar Value: \$4,515		

CCL	Description	Applications	Dollar Value
BELARUS	3		
3A001	Electronic Devices/Components	1	\$5,170
3E001	Technology for Dev or Prod of Certain Items in 3A/	2	\$2
4E001	Technology for Dev/Prod/Use of Certain Equip/Softw	1	\$1
6A003	Cameras	1	\$55,000
	Total Applications: 5		
	Total CCL's: 4		
	Total Dollar Value: \$60,173		

CCL	Description	Applications	Dollar Value
BULGAF	IIA		
0A982	Thumbcuffs, Leg Irons and Shackles	2	\$96,540
0A984	Shotguns, Buckshot, Shotgun Shells	4	\$138,784
0A987	Optical Sighting Devices for Firearms	1	\$510
1A005	Body Armor	1	\$46,815
3A001	Electronic Devices/Components	3	\$6,829
3A981	Polygraphs/Fingerprint Analyzers/Cameras/Equipment	3	\$236,000
3E001	Technology for Dev or Prod of Certain Items in 3A/	1	\$1
4D001	Software for Certain Equipment/Software in 4A-4D	1	\$1
4E001	Technology for Dev/Prod/Use of Certain Equip/Softw	1	\$1
5A002	Systems/Equipment/Integrated Circuits for Info Sec	1	\$17,000
5D002	Software for Information Security	1	\$5,000
5E001	Technology for Dev/Prod/Use, Etc, of Equip. in 5A0	2	\$2
6A008	Radar Systems/Equipment/Assemblies	1	\$13,500,000
	Total Applications: 20		
	Total CCL's: 13		

Total Dollar Value: \$14,047,483

CCL	Description	Applications	Dollar Value
CAMBOI	DIA		
3A231	Neutron Generator Systems Including Tubes	1	\$102,000
	Total Applications: 1		
	Total CCL's: 1		
	Total Dollar Value: \$102,000		

CCL	Description	Applications	Dollar Value
CHINA (F	PRC)		
EAR99	Items Subject to the Ear N.E.S.	16	\$1,550,980
0A987	Optical Sighting Devices for Firearms	4	\$41,007
1A999	Specific Processing Equipment, N.E.S	1	\$21,354
1C008	Non-Fluorinated Polymeric Substances	2	\$209,948
1C010	Fibrous/Filamentary Materials Used In Matrix Struc	4	\$2,708,021
1C202	Aluminum and Titanium Alloys in the Form of Tubes/	4	\$895,100
1C210	Fibrous/Filamentary Materials Not Controlled by 1C	4	\$5,280,000
1C231	Hafnium	1	\$1,773
1C234	Zirconium, with a Hafnium Content	4	\$305,913
1C350	Chemicals, Precursors for Toxic Chemical Agents	23	\$21,844,225
1C351	Human Pathogens, Zoonoses, and Toxins	1	\$2,870
1E001	Technology for Development of Equipment Under 1A00	3	\$2
1E103	Technology to Regulate Temperature of Composites	1	\$0
1E201	Technology for Use of 1A002,1A202,1A225 to 1B225	2	\$1
1E350	Technology for Use of 1C350 Chemicals	3	\$3
1E351	Technology for Use of Microbiological Materials	3	\$3
1E994	Technology for 1C993 Materials or 1C994 Fluids	1	\$0
2B001	Numerical Control Units/Motion Control Boards	6	\$7,793,965
2B006	Dimensional Inspection/Measuring Systems or Equipm	1	\$8,068
2B008	Assemblies/Units/Inserts for Machine Tools in 2B00	1	\$322,800
2B201	Machine Tools for Removing or Cutting Metals	3	\$1,192,500
2B204	Isostatic Presses Not Controlled by 2B004 or 2B104	1	\$356,000
2B227	Vacuum and Controlled Atmosphere Melting/Casting F	1	\$1,348,500
2B229	Centrifugal Balancing Machines	1	\$35,260
2B230	Pressure Transducers	33	\$510,030
2B350	Chemical Manufacturing Facilities and Equipment	32	\$2,909,352
2B351	Toxic Gas Monitoring Systems & Dedicated Detectors	58	\$964,372

CCL	Description	Applications	Dollar Value
CHINA (F	PRC) (Continued)		
2B352	Equipment for Handling Biological Materials	3	\$3,541,990
2D002	Adaptive Control/Electronic Device Software	1	\$0
2E001	Technology Supporting Equipment/Software in 2A/2b/	1	\$1
2E002	Technology Supporting Equipment/Production in 2A/2	1	\$1
2E003	Other Technology	3	\$0
2E201	Technology for Use of Commodities Controlled by 2A	2	\$1
2E301	Technology for Use of Commodities Controlled by 2B	4	\$3
3A001	Electronic Devices/Components	32	\$1,558,888,701
3A002	General Purpose Electronic Equipment	21	\$1,650,269
3A225	Inverters/Converters/Frequency Changers/Generators	4	\$70,438
3A228	Switching Devices	1	\$25,246
3A231	Neutron Generator Systems Including Tubes	4	\$1,122,932
3A232	Detonators/Multipoint Initiation Systems	1	\$635,500
3A233	Mass Spectrometers	3	\$405,854
3A991	Electronic Devices and Components	1	\$186
3A992	General Purpose Electronic Equipment	2	\$7,381
3A999	Specific Processing Equipment, N.E.S.	3	\$82,100
3B001	Epitaxial Equipment for Semiconductors	11	\$387,448,792
3C001	Hetero-Epitaxial Materials	2	\$1,013,900
3C003	Organo-Inorganic Compounds Described in This Entry	2	\$1,469,000
3C004	Hydrides of Phosphorus, Arsenic, or Antimony	8	\$2,969,479
3D001	Software for Dev or Prod of Equip Certain Items on	10	\$0
3D002	Software for Use of Certain Equipment Controlled B	1	\$0
3D003	CAD Software For Semiconductor Devices/Integrated	52	\$6,451,823
3E001	Technology for Dev or Prod of Certain Items in 3A/	180	\$2,000,148
3E002	Other Technology for Items in Category 3	11	\$1,000,010
3E003	Other "Technology"	1	\$1
3E201	Technology for the Use of Certain Items in 3A	1	\$1
4A994	Items Not Controlled by 4A001/4A002/4A003	2	\$3,565,470
4D001	Software for Certain Equipment/Software In 4A-4D	3	\$3
4D003	Specific Software, as Described in This Entry	26	\$26
4E001	Technology for Dev/Prod/Use of Certain Equip/Softw	83	\$83
5A001	Telecommunications/Transmission Equipment	3	\$314,000
5A002	Systems/Equipment/Integrated Circuits for Info Sec	1	\$2
5A992	Information Security Equipment	1	\$1

CCL	Description	Applications	Dollar Value
CHINA (P	RC) (Continued)		
5B001	Equipment for Dev/Prod or Use of Items on 5A001	2	\$350,000
5B991	Telecommunications Test Equipment	1	\$5,207
5D001	Software for Dev/Prod/Use of Items in 5A001/5B001/	2	\$1
5D002	Software for Information Security	4	\$7
5D991	Software for Dev/Prod/Use with 5B994 Test Equipmen	1	\$5,207
5E001	Technology for Dev/Prod/Use, Etc, of Equip. in 5A0	142	\$1,758,096
5E002	Technology for Dev/Prod/Use of Information Securit	2	\$2
5E991	Technology for Dev/Prod/Use of 5b994 or 5d991	1	\$1
6A003	Cameras	84	\$2,907,713
6A005	Optical Equipment (Lasers)	8	\$7,078,134
6A006	Magnetometers/Magnetic Gradiometers/Compensation S	6	\$849,460
6A007	Gravity Meters (Gravimeters)/Gravity Gradiometers	1	\$199,340
6D003	Other Software	1	\$7,121,000
6E001	Technology for Development of Equipment/Materials/	3	\$3
6E002	Technology for Production of Equipment/Materials I	2	\$1
7A103	Instrumentation, Navigation Equipment/Systems Not	11	\$4,306,527
7D003	Other Software	1	\$1
7E004	Other Technology	1	\$0
9B990	Vibration Test Equipment	2	\$26,711
9E003	Other Technology	1	\$300,000
	Total Applications: 777		
	Total CCL's: 82		

	Description	Applications	Dollar Value
CUBA			
EAR99	tems Subject to the Ear N.E.S.	517	\$1,973,178,650
0A001 N	Nuclear Reactors	1	\$16
3A002 (	General Purpose Electronic Equipment	1	\$17,000
3A992 (	General Purpose Electronic Equipment	1	\$250
4A994 I	tems Not Controlled by 4A001/4A002/4A003	5	\$112,600
5A991	Transmission Items not W/I Parameters in 5A001	1	\$34,220
6A003 (	Cameras	1	\$4,000
7A994 (	Other Navigation/Airborne Communication Equipment	1	\$20,182

Total Dollar Value: \$2,045,872,800

**Appendix F: Approved Applications for Country Group D:1 and Cuba** 

CCL	Description	Applications	Dollar Value		
CUBA (C	CUBA (Continued)				
8A001	Submersible Vehicles or Surface Vessels	1	\$450,000		
8A992	Underwater Camera Equipment	23	\$140,456,000		
9A991	Aircraft and Certain Gas Turbine Engines N.E.S.	44	\$398,360,000		
9A992	Canopies, Harnesses, and Platform Mechanisms	1	\$19,500,000		
	Total Applications: 581				
	Total CCL'2: 12				
	Total Dollar Value: \$2,532,132,918				

CCL	Description	Applications	Dollar Value
ESTONIA			
0A982	Thumbcuffs, Leg Irons and Shackles	1	\$1,540
1C351	Human Pathogens, Zoonoses, and Toxins	1	\$211
2B230	Pressure Transducers	1	\$860
3A001	Electronic Devices/Components	1	\$276
3E001	Technology for Dev or Prod of Certain Items in 3A/	1	\$1
3E003	Other "Technology"	1	\$1
5E001	Technology for Dev/Prod/Use, Etc, of Equip. in 5A0	1	\$1
	Total Applications: 5		
	Total CCL's: 7		
	Total Dollar Value: \$2,890		

CCL	Description	Applications	Dollar Value
GEORGI	A		
1A005	Body Armor	1	\$6,331
1C225	Boron and Boron Compounds/Mixtures and Loaded Mate	1	\$1,650
	Total Applications: 2		
	Total CCL's: 2		
	Total Dollar Value: \$7,981		

CCL	Description	<b>Applications</b>	Dollar Value
KAZAKH	STAN		
1B201	Filament Winding Machines	1	\$2,998,000
3A231	Neutron Generator Systems Including Tubes	1	\$102,000
5E001	Technology for Dev/Prod/Use, Etc, of Equip. in 5A0	1	\$0
6A001	Acoustics	1	\$190,000
6A002	Optical Sensors	1	\$81,750
7A103	Instrumentation, Navigation Equipment/Systems Not	1	\$160,000
	Total Applications: 6		
	Total CCL's: 6		
	Total Dollar Value: \$3,531,750		

CCL	Description	Applications	Dollar Value
KOREA,	NORTH		
EAR99	Items Subject to the Ear N.E.S.	2	\$1,611,597
1C107	Graphite and Ceramic Materials	1	\$400,000
1C981	Crude Petroleum/Tar Sands/Crude Shale	1	\$0
1C992	Oil Well Perforators	1	\$673,453
2B998	Assemblies, Units or Inserts Designed for Tools	1	\$73
2B999	Specific Processing Equipment, N.E.S.	1	\$204,371
4A001	Ruggedized Electronic Computers/Related Equipment	1	\$10,500
4D001	Software for Certain Equipment/Software in 4A-4D	1	\$4,500
5D002	Software for Information Security	2	\$11,900
7A994	Other Navigation/Airborne Communication Equipment	2	\$30,650
	Total Applications: 9		
	Total CCL's: 10		
	Total Dollar Value: \$2,947,044		

CCL	Description	Applications	Dollar Value			
KYRGYZ	KYRGYZSTAN					
	Total Applications: 0					
	Total CCL's: 0					
	Total Dollar Value: \$0					

CCL	Description	Applications	Dollar Value
LAOS			
	Total Applications: 0		
	Total CCL's: 0		
	Total Dollar Value: \$0		

CCL	Description	<b>Applications</b>	Dollar Value
LATVIA			
0A982	Thumbouffs, Leg Irons and Shackles	1	\$1,540
0A987	Optical Sighting Devices for Firearms	2	\$32,415
3A001	Electronic Devices/Components	2	\$37,039
3A992	General Purpose Electronic Equipment	1	\$5,209
5A002	Systems/Equipment/Integrated Circuits for Info Sec	3	\$18,525
5D002	Software for Information Security	3	\$16,703
6A003	Cameras	1	\$12,000
	Total Applications: 10		
	Total CCL's: 7		
	Total Dollar Value: \$123,431		

CCL	Description	Applications	Dollar Value
LITHUANI	A		
0A982	Thumbcuffs, Leg Irons and Shackles	1	\$1,540
0A987	Optical Sighting Devices for Firearms	1	\$5,000
1C210	Fibrous/Filamentary Materials Not Controlled by 1C	1	\$307,000
3A001	Electronic Devices/Components	2	\$6,964
3A002	General Purpose Electronic Equipment	1	\$620
5D002	Software for Information Security	3	\$4,267
6A003	Cameras	1	\$40,000
6A005	Optical Equipment (Lasers)	2	\$41,664
	Total Applications: 11		
	Total CCL's: 8		
-	Total Dollar Value: \$407,055		

CCL	Description	Applications	Dollar Value
MOLDOV	/A		
2B230	Pressure Transducers	1	\$860
	Total Applications: 1		
	Total CCL's: 1		
	Total Dollar Value: \$860		

CCL	Description	Applications	Dollar Value		
MONGOL	MONGOLIA				
	Total Applications: 0				
	Total CCL's: 0				
	Total Dollar Value: \$0				

CCL	Description	Applications	Dollar Value
ROMANIA	1		
0A982	Thumbcuffs, Leg Irons and Shackles	1	\$1,540
0A987	Optical Sighting Devices for Firearms	2	\$30,000
1C117	Tungsten/Molybdenum/Alloys of These Metals in Sphe	2	\$74,500
3A001	Electronic Devices/Components	1	\$98
3A225	Inverters/Converters/Frequency Changers/Generators	1	\$16,249
3A981	Polygraphs/Fingerprint Analyzers/Cameras/Equipment	3	\$71,000
3E001	Technology for Dev or Prod ff Certain Items in 3A/	9	\$8
4D003	Specific Software, as Described in This Entry	2	\$2
4E001	Technology for Dev/Prod/Use of Certain Equip/Softw	2	\$2
5D002	Software for Information Security	3	\$19,875
5E001	Technology for Dev/Prod/Use, Etc, of Equip. in 5A0	1	\$0
6A003	Cameras	2	\$96,500
7A103	Instrumentation, Navigation Equipment/Systems Not	1	\$245,000
	Total Applications: 27		
	Total CCL's: 13		
	Total Dollar Value: \$554,774		

CCL	Description	Applications	Dollar Value
RUSSIA			
EAR99	Items Subject to the Ear N.E.S.	39	\$1,813,453
0A984	Shotguns, Buckshot, Shotgun Shells	1	\$8,082
0A987	Optical Sighting Devices for Firearms	7	\$598,694
1A985	Fingerprinting Powders, Dyes, and Inks	1	\$165,500
1A999	Specific Processing Equipment, N.E.S	5	\$132,305
1C006	Fluids and Lubricating Materials	2	\$37,454
1C018	Materials on the International Munitions List	1	\$13,200
1C232	Helium-3 or Helium Isotopically Enriched in the He	1	\$3,000,000
1D002	Software Utilized for Development of Organic Matri	1	\$0
1E001	Technology for Development of Equipment Under 1A00	1	\$0
1E103	Technology to Regulate Temperature of Composites	1	\$0
3A001	Electronic Devices/Components	34	\$344,846
3A002	General Purpose Electronic Equipment	8	\$464,776
3A292	Oscilloscopes and Transient Recorders	1	\$14,995
3A981	Polygraphs/Fingerprint Analyzers/Cameras/Equipment	4	\$1,012,490
3A992	General Purpose Electronic Equipment	2	\$42,555
3A999	Specific Processing Equipment, N.E.S.	6	\$131,546
3D002	Software for Use of Certain Equipment Controlled B	1	\$1
3D003	CAD Software for Semiconductor Devices/Integrated	3	\$5,942
3D991	General Purpose Electronic Equipment for 3A992	1	\$995
3E001	Technology for Dev or Prod of Certain Items in 3A/	13	\$14
3E003	Other "Technology"	1	\$1_
3E991	Manufacturing and Test Equipment for 3B991/92	1	\$738
4A994	Items Not Controlled by 4A001/4A002/4A003	9	\$64,306
4D001	Software for Certain Equipment/Software in 4A-4D	1	\$1
4D003	Specific Software, as Described in This Entry	98	\$98
4D994	Software for Dev/Prod/Use of Items in 4A994/4B994/	3	\$1,806
4E001	Technology for Dev/Prod/Use of Certain Equip/Softw	102	\$102
4E992	Technology for Dev/Prod/Use of 4A994/4B994/4C994	2	\$2,006
5A991	Transmission Items Not W/I Parameters in 5A001	2	\$43,606
5D002	Software for Information Security	3	\$2,105,141
5D992	Software Not Controlled by 5D002	3	\$40,401

CCL	Description	Applications	Dollar Value
RUSSIA	(CONTINUED)		
5E001	Technology For Dev/Prod/Use, Etc, Of Equip. In 5A0	8	\$105
5E002	Technology For Dev/Prod/Use Of Information Securit	32	\$32
6A001	Acoustics	3	\$325,948
6A003	Cameras	56	\$2,640,995
6A005	Optical Equipment (Lasers)	2	\$43,014
6A994	Optics, Not Controlled by 6A004	1	\$5,522
6E001	Technology for Development of Equipment/Materials/	1	\$1
7A103	Instrumentation, Navigation Equipment/Systems Not	4	\$1,218,687
7D003	Other Software	1	\$1
7E004	Other Technology	1	\$0
9A001	Aero Gas Turbine Engines	1	\$239,250
9A003	Gas Turbine Engine Propulsion Systems	1	\$250,000
9B106	Environmental Chambers and Anechoic Chambers	1	\$750,000
9E001	Technology for Dev of Equipment or Software in 9A/	5	\$5
	Total Applications: 299		
	Total CCL's: 46		
	Total Dollar Value: \$15,518,614		

CCL	Description	Applications	Dollar Value
TAJIKIST	AN		
6A003	Cameras	1	\$82,000
	TOTAL Applications: 1		
	Total CCL's: 1		
	Total Dollar Value: \$82,000		

CCL	Description	Applications	Dollar Value
TURKMENISTAN			
	Total Applications: 0		
	Total CCL's: 0		
	Total Dollar Value: \$0		

**Appendix F: Approved Applications for Country Group D:1 and Cuba** 

CCL	Description	Applications	Dollar Value
UKRAINE			
0A984	Shotguns, Buckshot,Shotgun Shells	2	\$18,088
0A986	Shotgun Shells (Except Buckshot Shells) and Parts	1	\$4,673
0A987	Optical Sighting Devices for Firearms	2	\$74,200
2E003	Other Technology	2	\$1
3A001	Electronic Devices/Components	5	\$24,796
3A002	General Purpose Electronic Equipment	2	\$48,876
5D002	Software for Information Security	1	\$135,000
5E001	Technology for Dev/Prod/Use, Etc, of Equip. In 5A0	1	\$1
6A003	Cameras	2	\$34,199
9B001	Equipment for Manufacturing Gas Turbine Blades/Van	1	\$1,176,000
	Total Applications: 18		
	Total CCL's: 10		
	Total Dollar Value: \$1,515,834		

CCL	Description	Applications	Dollar Value	
UZBEKISTAN				
1C350	Chemicals, Precursors for Toxic Chemical Agents	1	\$20,200,000	
2B350	Chemical Manufacturing Facilities and Equipment	1	\$14,976	
3A231	Neutron Generator Systems Including Tubes	1	\$1,200,000	
4E001	Technology for Dev/Prod/Use of Certain Equip/Softw	1	\$1	
	Total Applications: 4			
	Total CCL's: 4			
	Total Dollar Value: \$21,414,977			