

Military Semiconductor Integrated Circuits

8-BIT MICROPROCESSORS & MICROCONTROLLERS 32-BIT CONTROLLERS AND PERIPHERALS

MIL-STD-883C

8-Bit Microprocessors, 32-Bit Controllers & Microcontrollers				883C Package Type and Lead Finish			
Device	883C	Description	Pins	DIL	FP	LCCC	CLCC
6800	/B	8-Bit Microprocessor	40	QA			
6802	/B	8-Bit Microprocessor with Clock and Optional RAM	40	QA			
6809	/B	8-Bit Microprocessor with Clock	40	QA			
68A09	/B	1.5 MHz 8-Bit Microprocessor with Clock	40	QA			
68B09	/B	2.0 MHz 8-Bit Microprocessor with Clock	40	QA			
6821	/B	8-Bit Peripheral Interface Adapter	40	QA			
68A21	/B	1.5 MHz 8-Bit Peripheral Interface Adapter	40	QA			
68B21	/B	12 MHz 8-Bit Peripheral Interface Adapter	40	QA			
6840	/B	Programmable Timer Module	28	XA			
6845	/B	CRT Controller	40	QA			
68488	/B	GPIO Support Module	40	QA			
68A488	/B	1.5 MHz GPIO Support Module	40	QA			
68B488	/B	2.0 MHz GPIO Support Module	40	QA			
6850	/B	Asynchronous Communications Interface Adapter	24	JA			
68A50	/B	1.5 MHz Asynchronous Communications Interface Adapter	24	JA			
68B50	/B	1.5 MHz Asynchronous Communications Interface Adapter	24	JA			
6852	/B	Synchronous Serial Data Adapter	24	JA			
6854	/B	Advanced Data-Link Controller	28	XA			
6875A	/B	6800 Clock Generator/Driver	16	EA			
68HC11A0	/B	8-Bit Microcontroller with 256 Bytes RAM	48	XA			
	/B	8-Bit Microcontroller with 256 Bytes RAM	52				2Q90
68HC11A1	/B	8-Bit Microcontroller, 256 Bytes RAM & 512 Bytes EEPROM	48	XA			
	/B	8-Bit Microcontroller, 256 Bytes RAM & 512 Bytes EEPROM	52				2Q90
68HC11F1	/B	Expanded 8-Bit Microcontroller with Non-Multiplexed Bus	68				4Q90
68HC811E2	/B	8-Bit Microcontroller with 2K EEPROM	48	XA			
	/B	8-Bit Microcontroller with 2K EEPROM	52				YC
68HC705C8	/B	8-Bit Microcontroller with 8K EPROM	40	3Q90			

Military Semiconductor Integrated Circuits

8-BIT MICROPROCESSORS & MICROCONTROLLERS 32-BIT CONTROLLERS AND PERIPHERALS

MIL-STD-883C

32-Bit Controllers & Microcontrollers				883C Package Type and Lead Finish			
Device	883C	Description	Pins	DIL	PGA	LCCC	CLCC
68332	/B	32-Bit Microcontroller	132				4Q90
68332	/B	32-Bit Microcontroller	132		4Q90		

Data Communications & Memory Management				883C Package Type and Lead Finish			
Device	883C	Description	Pins	DIL	PGA	LCCC	CLCC
68302	/B	Integrated Mult-Protocol Processor	132		4Q90		4Q90
68442-8	/B	Expanded DDMA Controller [$T_C = -55^{\circ}\text{C}$ to $+110^{\circ}\text{C}$]	68		ZA		2Q90
68605-10	/B	X.25 Protocol Controller	84		4Q90		4Q90
68824-10	/B	Token Bus Controller	84		2Q90		2Q90
68851-12	/B	Page Memory Management Unit	132		2Q90		
68851-16	/B	Page Memory Management Unit	132		2Q90		

Military Semiconductor Integrated Circuits

8-BIT MICROPROCESSORS & MICROCONTROLLERS 32-BIT CONTROLLERS AND PERIPHERALS

Standard Military Drawings (SMD)

8-Bit Microcontrollers, 32-Bit Controllers & Microcontrollers				SMD Package Type and Lead Finish			
Device	SMD	Description	Pins	DIL	PGA	LCCC	CLCC
68HC11A0	5962-90510	8-Bit Microcontroller	48	XA			
	5962-90510	8-Bit Microcontroller	52				2Q90
68HC11A1	5962-90510	8-Bit Microcontroller, 512 Bytes EEPROM	48	XA			
	5962-90510	8-Bit Microcontroller, 512 Bytes EEPROM	52				2Q90
68HC811E2	5962-89527	8-Bit Microcontroller with 2K EEPROM	48	XA			
	5962-89527	8-Bit Microcontroller with 2K EEPROM	52				3Q90
68HC705C8	Planned	8-Bit Microcontroller with 8K EPROM	40	3Q90			

32-Bit Controllers & Microcontrollers				SMD Package Type and Lead Finish			
Device	SMD	Description	Pins	DIL	PGA	LCCC	CLCC
68332	Planned	32-Bit Microcontroller	132				4Q90
68332	Planned	32-Bit Microcontroller	132		4Q90		

Data Communications & Memory Management				SMD Package Type and Lead Finish			
Device	SMD	Description	Pins	DIL	PGA	LCCC	CLCC
68302	Planned	Integrated Multi-Protocol Processor with RAM & Timers	132		4Q90		4Q90
68442-8	5962-86811	Expanded DDMA Controller [T _C = -55°C to +110°C]	68		YC		2Q90
68605-10	Planned	X.25 Protocol Controller	84		4Q90		Planned
68824-10	Planned	Token Bus Controller	84		2Q90		Planned
68851-12	5962-89461	Page Memory Management Unit	132		2Q90		2Q90
68851-16	5962-89461	Page Memory Management Unit	132		2Q90		2Q90

Military Semiconductor Integrated Circuits

16 AND 32-BIT MICROPROCESSORS

MIL-STD-883C

16 and 32-Bit Microprocessors				883C Package Type and Lead Finish			
Device	883C	Description	Pins	DIL	PGA	LCCC	CLCC
68000-8*	/B	16-Bit external/32-Bit internal MPU	64	XA			
	/B	16-Bit external/32-Bit internal MPU	68		ZA	UA	2Q90
68000-8T*	/B	16-Bit external/32-Bit internal MPU	68			UA**	
68000-10*	/B	16-Bit external/32-Bit internal MPU	64	XA			
	/B	16-Bit external/32-Bit internal MPU	68		ZA	UA	2Q90
68000-10T*	/B	16-Bit external/32-Bit internal MPU	68			UA**	
68000-12*	/B	16-Bit external/32-Bit internal MPU	64	3Q90			
	/B	16-Bit external/32-Bit internal MPU	68		3Q90	3Q90	3Q90
68000-12T*	/B	16-Bit external/32-Bit internal MPU	68			3Q90	
68020-16	/B	32-Bit external and internal	114		ZA		
	/B	32-Bit external and internal	132				YC
68020-20	/B	32-Bit external and internal	114		ZA		
	/B	32-Bit external and internal	132				YC
68020-25	/B	32-Bit external and internal	114		4Q90		
	/B	32-Bit external and internal	132				4Q90
68Q30-16	/B	32-Bit external and internal w/built-in PMMU	128		ZA		
	/B	32-Bit external and internal w/built-in PMMU	132				2Q90**
68030-20	/B	32-Bit external and internal w/built-in PMMU	128		ZA		
	/B	32-Bit external and internal w/built-in PMMU	132				2Q90**
68030-25	/B	32-Bit external and internal w/built-in PMMU	128		ZA		
	/B	32-Bit external and internal w/built-in PMMU	132				2Q90**
68030-33	/B	32-Bit external and internal w/built-in PMMU	128		ZA		
	/B	32-Bit external and internal w/built-in PMMU	132				2Q90**
68040	/B	32-Bit external and internal w/built-in PMMU and FPU	179		1Q91		
	/B	32-Bit external and internal w/built-in PMMU and FPU	TBD				1Q91
68881-16	/B	32-Bit Floating Point Coprocessor	68		ZA		YC
68881-20	/B	32-Bit Floating Point Coprocessor	68		ZA		YC
68882-16	/B	Enhanced 16 MHz 32-Bit Floating Point Coprocessor	68		ZA		2Q90
68882-20	/B	Enhanced 20 MHz 32-Bit Floating Point Coprocessor	68		ZA		2Q90
68882-25	/B	Enhanced 25 MHz 32-Bit Floating Point Coprocessor	68		ZA		2Q90
68882-33	/B	Enhanced 33 MHz 32-Bit Floating Point Coprocessor	68		ZA		2Q90
68HC000-8	/B	16-Bit external/32-Bit internal HCMOS MPU	64	XA			
	/B	16-Bit external/32-Bit internal HCMOS MPU	68		ZA	UA	2Q90
68HC000-10	/B	16-Bit external/32-Bit internal HCMOS MPU	64	XA			
	/B	16-Bit external/32-Bit internal HCMOS MPU	68		ZA	UA	2Q90
68HC000-12	/B	16-Bit external/32-Bit internal HCMOS MPU	64	XA			
	/B	16-Bit external/32-Bit internal HCMOS MPU	68		ZA	UA	2Q90
68HC001	/B	Configurable 8 or 16-Bit MPU	68		3Q90		Planned

* [T_C = -55° to +110°C]

** This device includes thermal pad(s).

T-90-60

Military Semiconductor Integrated Circuits

16 AND 32-BIT MICROPROCESSORS

Standard Military Drawings (SMD)

16 and 32-Bit Microprocessors				SMD Package Type and Lead Finish			
Device	SMD	Description	Pins	DIL	PGA	LCCC	CLCC
68000-8*	8202102	16-Bit external/32-Bit internal MPU	64	YA			
		16-Bit external/32-Bit internal MPU	68		TA	ZA	1Q90
68000-8T*	8202102	16-Bit external/32-Bit internal MPU	68			XA**	
68000-10*	8202103	16-Bit external/32-Bit internal MPU	64	YA			
		16-Bit external/32-Bit internal MPU	68		TA	ZA	1Q90
68000-10T*	8202103	16-Bit external/32-Bit internal MPU	68			XA**	
68000-12*	82021	16-Bit external/32-Bit internal MPU	64	3Q90			
		16-Bit external/32-Bit internal MPU	68		3Q90	3Q90	3Q90
68000-12T*	8202103	16-Bit external/32-Bit internal MPU	68			XA**	
68020-16	5962-8603202	32-Bit external and internal	114		XA		
		32-Bit external and internal	132				YC
68020-20	5962-8603203	32-Bit external and internal	114		XA		
		32-Bit external and internal	132				YC
68020-25	5962-86032	32-Bit external and internal	114		4Q90		
		32-Bit external and internal	132				4Q90
68030-16	5962-89464	32-Bit external and internal w/built-in PMMU	128		2Q90		
	5962-89464	32-Bit external and internal w/built-in PMMU	132				2Q90**
68030-20	5962-89464	32-Bit external and internal w/built-in PMMU	128		2Q90		
	5962-89464	32-Bit external and internal w/built-in PMMU	132				2Q90**
68030-25	5962-89464	32-Bit external and internal w/built-in PMMU	128		2Q90		
	5962-89464	32-Bit external and internal w/built-in PMMU	132				2Q90**
68030-33	5962-89464	32-Bit external and internal w/built-in PMMU	128		2Q90		
	5962-89464	32-Bit external and internal w/built-in PMMU	132				2Q90**
68040	Planned	32-Bit external and internal w/built-in PMMU and FPU	179		1Q91		
	Planned	32-Bit external and internal w/built-in PMMU and FPU	TBD				1Q91
68881-16	5962-8602102	32-Bit Floating Point Coprocessor	68		XA		YC
68881-20	5962-8602103	32-Bit Floating Point Coprocessor	68		XA		YC
68882-16	5962-89463	Enhanced 32-Bit Floating Point Coprocessor	68		2Q90		2Q90
68882-20	5962-89463	Enhanced 32-Bit Floating Point Coprocessor	68		2Q90		2Q90
68882-25	5962-89463	Enhanced 32-Bit Floating Point Coprocessor	68		2Q90		2Q90
68882-33	5962-89463	Enhanced 32-Bit Floating Point Coprocessor	68		2Q90		2Q90
68HC000-8	5962-89462	16-Bit external/32-Bit internal HCMOS MPU	64	2Q90			
	5962-89462	16-Bit external/32-Bit internal HCMOS MPU	68		2Q90	2Q90	2Q90
68HC000-10	5962-89462	16-Bit external/32-Bit internal HCMOS MPU	64	2Q90			
	5962-89462	16-Bit external/32-Bit internal HCMOS MPU	68		2Q90	2Q90	2Q90
68HC000-12	5962-89462	16-Bit external/32-Bit internal HCMOS MPU	64	2Q90			
	5962-89462	16-Bit external/32-Bit internal HCMOS MPU	68		2Q90	2Q90	2Q90
68HC001	Planned	Configurable 16-Bit or 8-Bit MPU	68		3Q90		Planned

* [T_C = -55° to +110°C]

** This device includes thermal pad(s).

Military Semiconductor Integrated Circuits

REDUCED INSTRUCTION SET COMPUTERS (RISC) DIGITAL SIGNAL PROCESSORS (DSP)

MIL-STD-883C

RISC				883C Package Type and Lead Finish			
Device	883C	Description	Pins	DIL	PGA	LCCC	CLCC
88100-20	/B	32-Bit RISC	180		3Q90		Planned
	/B	32-Bit RISC	200				
88100-25	/B	32-Bit RISC	180		3Q90		Planned
	/B	32-Bit RISC	200				
88200-20	/B	16K Cache/Memory Management Unit	180		3Q90		Planned
	/B	16K Cache/Memory Management Unit	200				
88200-25	/B	16K Cache/Memory Management Unit	180		3Q90		
	/B	16K Cache/Memory Management Unit	200				

DSP				883C Package Type and Lead Finish			
Device	883C	Description	Pins	DIL	PGA	LCCC	CLCC
56001-20	/B	56-Bit Digital Signal Processor	88		ZA		2Q90
	/B	56-Bit Digital Signal Processor	100				
96002-27	/B	96-Bit Floating Point Digital Signal Processor	TBD		4Q91		4Q91
	/B	96-Bit Floating Point Digital Signal Processor	TBD				

Military Semiconductor Integrated Circuits

REDUCED INSTRUCTION SET COMPUTERS (RISC) DIGITAL SIGNAL PROCESSORS (DSP)

Standard Military Drawings (SMD)

RISC				SMD Package Type and Lead Finish			
Device	SMD	Description	Pins	DIL	PGA	LCCC	CLCC
88100-20	Planned	32-Bit RISC	180		3Q90		
	Planned	32-Bit RISC	200				Planned
88100-25	Planned	32-Bit RISC	180		3Q90		
	Planned	32-Bit RISC	200				Planned
88200-20	Planned	16K Cache/Memory Management Unit	180		3Q90		
88200-25	Planned	Cache/Memory Management Unit	200				Planned
	Planned	Cache/Memory Management Unit	180		3Q90		
	Planned	16K Cache/Memory Management Unit	200				Planned

DSP				SMD Package Type and Lead Finish			
Device	SMD	Description	Pins	DIL	PGA	LCCC	CLCC
56001-20	5962-89512	56-Bit Digital Signal Processor	88		2Q90		
	5962-89512	56-Bit Digital Signal Processor	100				2Q90
96002-27	Planned	96-Bit Floating Point Digital Signal Processor	TBD		4Q91		4Q91
	Planned	96-Bit Floating Point Digital Signal Processor	TBD				4Q91