

DSP (Digital Signal Processor) Products

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Contents

DSP56800 Family General Purpose	3-5
DSP56300 Family High Performance	6-11
Device Packages	12
Application Software	13-17
Motorola DSP Device Literature	18-19
DSP Development Tools	20-21
Terms	22
Wireless & DSP Contacts	24

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DSP56800 Family General Purpose 16-Bit Fixed Point*

Part	Performance	Program ROM/RAM/FLASH	Data ROM/RAM/FLASH	Peripherals	Package Pins	Comments
DSP56F801FA80	80 MHz	— / 1K / 8K	— / 1K / 2K	SCI, SPI, ADC, PWM, Quad Timer	48-pin LQFP	MCU friendly instruction set, OnCE for debug, on-chip relaxation oscillator, 2K BootFLASH, up to 11 GPIO. Order 2-unit sample pack as SPAK56801FA80. MOQ of 250.
DSP56F803BU80	80 MHz	— / 512 / 32K	— / 2K / 4K	CAN, SCI, SPI, ADC, PWM, Quadrature Decoder, Quad Timer	100-pin LQFP	MCU friendly instruction set, OnCE for debug, 2K Boot Flash, external memory expansion available, up to 16 GPIO. Order 2-unit sample pack as SPAK56F803BU80. S, MOQ of 90.
DSP56F805FV80	80 MHz	— / 512 / 32K	— / 2K / 4K	CAN, SCIs, SPI, ADC, PWMs, Quadrature Decoders, Quad Timers	144-pin LQFP	MCU friendly instruction set, OnCE for debug, 2K Boot Flash, external memory expansion available, up to 32 GPIO. SPAK56F805FV80. S, MOQ of 60.
DSP56F807PY80 (LQFP) DSP56F807VF80 (MAPBGA)	80 MHz	— / 2K / 60K	— / 2K / 8K	CAN, SCIs, SPI, ADCs, PWMs, Quadrature Decoders, Quad Timers	160-pin LQFP 160 MAPBGA	MCU friendly instruction set, OnCE for debug, 2K Boot Flash, external memory expansion available, up to 32 GPIO. MOQ of 60 for LQFP. SPAK56F807PY80 or SPAK56F807VF80. MOQ of 24 for MAPBGA.
DSP56F826BU80 (LQFP)	80 MHz	— / 512 / 32K	— / 4K / 2K	SCI, SPI, SSI, TOD, Quad Timer	100-pin LQFP	MCU friendly instruction set, OnCE for debug, 2K Boot Flash, external memory expansion available, up to 48 GPIO. SPAK56F826BU80. MOQ of 90.
DSP56F827FG80 (LQFP)	80 MHz	— / 1K / 64K	— / 4K / 4K	SCI, SPI, SSI, TOD, ADC, Quad Timer	128-pin LQFP	MCU friendly instruction set, OnCE for debug, external memory expansion available, up to 52 GPIO. SPAK56F827FG80. MOQ of 60.

DSP56800 Family General Purpose 16-Bit Fixed Point* (Continued)

Applications	Development Tools	Benefits
Motion Control <ul style="list-style-type: none"> • Smart appliances • Environmental controls • Instrumentation 	Refer to the "Development Tools" section of this guide	Precise programming of drive waveforms allows control over power consumption, reducing noise and other forms of energy usage. Provides either vector or vectorless control depending on application need and motor type; DSP type can be selected to match exact design requirements. Distortion correction to assure waveform purity.
Industrial <ul style="list-style-type: none"> • Uninterruptable power supplies • Noise cancellation/suppression • Temperature control • HVAC • Inverters and AC-to-DC conversion • Lighting • Automation 	Refer to the "Development Tools" section of this guide	Provides specific I/O and memory tailored to the design need. Capabilities range from lowest cost part for sensorless speed-control algorithms to parts having extended memory and I/O suitable for high-end systems. Has extended PWM and ADC modules, as well as low-cost BootFLASH, for all types of motor-control, conversion, and automation requirements. High number of MIPS allows control of each axis in multi-axis systems.
Transportation <ul style="list-style-type: none"> • Fuel management system • Proximity sensors • Airbags • Traffic light control • Engine management and control <ul style="list-style-type: none"> - Knock detection - Aircraft, automotive, marine 	Refer to the "Development Tools" section of this guide	CAN (controller area network) protocol designed to be used as a vehicle serial data bus, meeting the specific requirements of real-time processing and reliable operation within a vehicle's EMI environment. It is extremely cost effective, while still providing the wide bandwidth needed for variety of transportation-related needs. The 56F805 and 56F807 provide dual motor control and full dual motor control, respectively, for high versatility.

DSP56800 Family General Purpose 16-Bit Fixed Point* (Continued)

Applications			Development Tools			Benefits
Instrumentation <ul style="list-style-type: none"> • Medical • Scientific • Servo controllers 			Refer to the "Development Tools" section of this guide			Excellent choice for position control in applications using AC induction and synchronous PM motors. These chips can be used for low-end position control, vector control, and sensorless vector control. Extended CAN (controller area network) for advanced applications. High MIPS for performance control of multi-axis systems. Allows for multiple fault inputs. High waveform purity is achieved by constant distortion correction.
Part	Performance	Program ROM/RAM	Data ROM/RAM	Peripherals	Package Pins	Comments
DSP56824BU70	70 MHz / 35 MIPS	32K / 128	2K / 3.5K	SPIx2, SSI, Timers x 3, PLL	100-pin LQFP	OnCE and PLL, 3.3 volt, 2.5V core, 2.7-3.6V I/O (5V tolerant) Order 2-unit sample pack as SPAKDSP56824BU70. P/S, MOQ of 90.
Applications			Development Tools			Benefits
Set top boxes Feature phones Digital messaging Cordless phones Modems Digital tapeless answering machines Caller ID Learning toys Meter reading devices Consumer audio Portable devices			DSPTOOLSCD DSP458CC DSP56824EVM Kit DSP56824ADSA Metrowerks Discover Metrowerks Code Warrior			General peripherals extend the architecture to meet the demands of low-power applications. The DSP56800 architecture allows for any of the ALU registers to serve as the source/destination for ALU operations. Separate and multiple buses are available to permit concurrent access to both program and data memory. Timers can operate when the core is in stop mode and can "wake-up" the core.

*Contact your local Motorola Sales Office or authorized Motorola distributor for availability.

DSP56300 Family High Performance 24-Bit Fixed Point*

Part	Performance	Program ROM/RAM	Data ROM/RAM	Peripherals	Package Pins	Comments
DSP56301VF80	80 MHz	— /4096	— /4096	32-bit PCI Host, ESSI, SCI, Triple Timer Module, GPIO	252 MAPBGA	MOQ=60; Order 2-unit sample pack as SPAKDSP301GC100; 3.0-3.6 Volts; 8K On-chip Memory; 2-4K Program RAM; 4-6K Data RAM
DSP56301VF100	100 MHz	— /4096	— /4096	32-bit PCI Host, ESSI, SCI, Triple Timer Module, GPIO	252 MAPBGA	MOQ=60; Order 2-unit sample pack as SPAKDSP301vf100; 3.0-3.6 Volts; 8K On-chip Memory; 2-4K Program RAM; 4-6K Data RAM
DSP56301PW80	80 MHz	— /4096	— /4096	32-bit PCI Host, ESSI, SCI, Triple Timer Module, GPIO	20-pin LQFP	MOQ=36; Order 2-unit sample pack as SPAKDSP301PW100; 3.0-3.6 Volts; 8K On-chip Memory; 2-4K Program RAM; 4-6K Data RAM
DSP56301PW100	100 MHz	— /4096	— /4096	32-bit PCI Host, ESSI, SCI, Triple Timer Module, GPIO	208-pin LQFP	MOQ=36; Order 2-unit sample pack as SPAKDSP301PW100; 3.0-3.6 Volts; 8K On-chip Memory; 2-4K Program RAM; 4-6K Data RAM
DSP56303VF100	100 MHz	— /4096	— /4096	8-bit Host, ESSI, SCI, Triple Timer Module, GPIO	196 MAPBGA	MOQ=126; Order 2-unit sample pack as SPAKDSP56303VF100; 3.0-3.6 Volts; 8K On-chip Memory; 2-4K Program RAM; 4-6K Data RAM
DSP56303PV100	100 MHz	— /4096	— /4096	8-bit Host, ESSI, SCI, Triple Timer Module, GPIO	144-pin LQFP	MOQ=60; Order 2-unit sample pack as SPAKDSP303PV100; 3.0-3.6 Volts; 8K On-chip Memory; 2-4K Program RAM; 4-6K Data RAM
XC56L307VF150	150 MHz	— /16384	— /49152	8-bit Host, ESSI, SCI, Triple Timer Module, EFCOP, GPIO	196 MAPBGA	MOQ=126; Order 2-unit sample pack as SPAKXCL307VF150; 34K On-chip Memory; 20-24K Program RAM; 16-48K Data RAM
XC56309VF100A	100 MHz	— /20480	— /14336	8-bit host, ESSI, SCI, Triple Timer Module, GPIO	196 MAPBGA	MOQ=126; order 2-unit sample pack as SPAKXC311VF150A; 128K on-chip memory; 270 effective MIPS; EFCOP (Enhanced Filter Co-Processor)

DSP56300 Family High Performance 24-Bit Fixed Point* (Continued)

Part	Performance	Program ROM/RAM	Data ROM/RAM	Peripherals	Package Pins	Comments
XC56309PV100A	100 MHz	—/20480	—/14336	8-bit host, ESSI, SCI, Triple Timer Module, GPIO	144-pin LQFP	MOQ=60; order 2-unit sample pack as SPAKXC309PV100A; 34K on-chip memory; 20-24K program RAM; 10-14K data RAM
XC56311VF150A	150 MHz	— /4096	— /4096	Dual ESSI, SCI, Triple Timer Module, Memory Switch Mate, GPIO, EFCOP	196 MAPBGA	MOQ=126; order 2-unit sample pack as SPAKXC309VF100A; 34K on-chip memory; 20-24K program RAM; 10-14K data RAM
XCB56362PV100	100 MHz / 100 MIPS	30K / 3K	12K / 11K	ESAI, SHI, DAX, GPIO, HDI08, Triple Timer Module	144-pin LQFP	MOQ=60; order 2-unit sample pack as SPAKB56362PV100; OnCE; 3.3V Core; 3.3V I/O
XCB56362PV120	120 MHz / 120 MIPS	30K / 3K	12K / 11K	ESAI, SHI, DAX, GPIO, HDI08, Triple Timer Module	144-pin LQFP	MOQ=60; order 2-unit sample pack as SPAKB56362PV120; OnCE; 3.3V Core; 3.3V I/O
XCF56362PV100	100 MHz / 100 MIPS	30K / 3K	12K / 11K	ESAI, SHI, DAX, GPIO, HDI08, Triple Timer Module,	144-pin LQFP	MOQ=60; order 2-unit sample pack as SPAKF56362PV100; OnCE; Dolby AC-3** and MPEG decoders; 3.3V Core; 3.3V I/O
XCF56362PV120	120 MHz / 120 MIPS	30K / 3K	12K / 11K	ESAI, SHI, DAX, GPIO, HDI08, Triple Timer Module,	144-pin LQFP	MOQ=60; order 2-unit sample pack as SPAKF56362PV120; OnCE; Dolby AC-3**, DTS** and MPEG decoders; 3.3V Core; 3.3V I/O
DSPB56364FU100	100 MHz / 100 MIPS	8K / 0.5K	None / 2.5K	ESAI, SHI, GPIO	100-pin LQFP	MOQ=60; order 2-unit sample pack as SPAKB56364FU100; OnCE; 3.3V Core; 3.3V I/O
XCB56366PV120	120 MHz / 120 MIPS	40K / 3K	32K + 8K / 13K + 7K	2 ESAI, SHI, DAX, GPIO, HDI08, Triple Timer Module	144-pin LQFP	MOQ=60; order 2-unit sample pack as SPAKB56366PV120; OnCE; 3.3V Core; 3.3V I/O

DSP56300 Family High Performance 24-Bit Fixed Point* (Continued)

Part	Performance	Program ROM/RAM	Data ROM/RAM	Peripherals	Package Pins	Comments
XCD56366PV120	120 MHz / 120 MIPS	40K / 3K	32K + 8K / 13K + 7K	2 ESAI, SHI, DAX, GPIO, HDI08, Triple Timer Module,	144-pin LQFP	MOQ=60; order 2-unit sample pack as SPAKF56366PV120; OnCE; Dolby AC-3** DTS** and MPEG decoders; 3.3V Core; 3.3V I/O
XCA56367PV150	150 MHz/ 150 MIPS	40K / 3K	32K + 8K / 13K + 7K	2 ESAI, SHI, DAX, GPIO, HDI08, Triple Timer Module	144-pin LQFP	MOQ=60; order 2-unit sample pack as SPAKA56367PV150; OnCE; Dolby AC-3**, DTS** and MPEG decoders; 1.5/1.8V Core; 3.3V I/O
XCB56367PV150	150 MHz / 150 MIPS	40K / 3K	32K + 8K / 13K + 7K	2 ESAI, SHI, DAX, GPIO, HDI08, Triple Timer Module,	144-pin LQFP	MOQ=60; order 2-unit sample pack as SPAKB56367PV150; OnCE; 1.5/1.8V Core; 3.3V I/O

DSP56300 Family High Performance 24-Bit Fixed Point* (Continued)

Applications	Development Tools	Benefits
<p>Communications</p> <ul style="list-style-type: none"> • Cellular/PCS telephone base stations • Video-phones (voice processing) • Modems/FAX machines (data compression) • Satellite communications • Digital FM broadcast transmitter <p>Computer Subsystems</p> <ul style="list-style-type: none"> • PC-FAX modems • MPEG video cards (video compression) • MPEG audio cards (audio processing) • Optical disk drives (motor controls) 	<p>DSP Application Development System (ADS) Kit: Order Part# DSP56301ADSx** [**A=PC (486 or better); **F=SUN, UNIX]</p> <p>DSP Application Development Module (ADM): Order Part # DSP56301ADM</p> <p>DSP Tools Software: Order Part # DSPTOOLSCD</p>	<p>The DSP56301 feature a PCI interface is particularly useful in multimedia and telecommunication applications such as video-conferencing and base transceiver stations.</p>
<p>Communications/Networking</p> <ul style="list-style-type: none"> • Wireless communications equipment • Voice over internet (VoIP) • Phones: Video, Speaker, & Feature <p>Automotive:</p> <ul style="list-style-type: none"> • Adaptive suspension • Controls: Emission and Engine • Antilock brakes <p>Consumer:</p> <ul style="list-style-type: none"> • Security systems • Televisions • Global positioning systems 	<p>DSP56303 Evaluation Module (EVM) Kit: Order Part # DSP56303EVM</p> <p>DSP Tools Software: Order Part # DSPTOOLSCD</p>	<p>The DSP56303 is a general purpose DSP intended for use in telecommunication applications. This is a low-cost, high-performance, entry-level DSP.</p>

DSP56300 Family High Performance 24-Bit Fixed Point* (Continued)

Applications	Development Tools	Benefits
<p>Communications</p> <ul style="list-style-type: none"> • Cellular/PCS telephone base stations • T1 multiplexer (voice/data compander) • ATM/ frame relay packet forming <p>Computer Subsystems</p> <ul style="list-style-type: none"> • MPEG audio cards (audio processing) • Image processing <p>Instrumentation:</p> <ul style="list-style-type: none"> • Geophysical survey ground radar <p>Medical Instrumentation:</p> <ul style="list-style-type: none"> • Ultrasound equipment • X-ray graphics <p>Automotive</p> <ul style="list-style-type: none"> • Noise canceling <p>Office Automation</p> <ul style="list-style-type: none"> • Fax modems (1/2 Duplex) • Data modems (V.32 & V.Fast) <p>Consumer</p> <ul style="list-style-type: none"> • Voice recognition systems • Flight simulators • Range finding devices • Wireless communication equipment 	<p>DSP56307 Evaluation Module (EVM) Kit Order Part # DSP56L307EVM</p> <p>DSP Tools Software: Order Part # DSPTOOLSCD</p>	<p>The DSP56307 is intended for use in applications requiring a large amount of on-chip memory, such as networking wireless infrastructure applications with general filtering operations and multi-channel processing. Use of the EFCOP (Enhanced Filter Coprocessor) can deliver an additional 70 MIPS.</p>

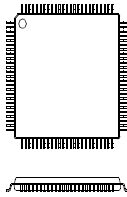
DSP56300 Family High Performance 24-Bit Fixed Point* (Continued)

Applications	Development Tools	Benefits
Automotive: <ul style="list-style-type: none"> • Adaptive suspension • Controls: Engine and Emission Consumer: <ul style="list-style-type: none"> • Digital radio • Television Computer Subsystems: <ul style="list-style-type: none"> • PC-FAX modems • Hard-disk drive (motor controls) Communications: <ul style="list-style-type: none"> • Voicemail systems • PBX-switch • Cellular telephone base stations 	DSP56309 Evaluation Module (EVM) Kit Order Part # DSP56309EVM DSP56311 Evaluation Module (EVM) Kit Order Part # DSP56311EVM DSP Tools Software: Order Part # DSPTOOLSCD	The DSP56309 is intended for applications requiring a large amount of on-chip memory such as wireless local loop and cellular transcoders.
Audio/Video Receivers Automotive Markets Car Radio DTV DVD Headphones Mini Systems Portable Audio Set Top Box	Generic 362EVM: DSP5636XEVM + SPAKB56362PV100/120 Software 362EVM: DSP5636XEVM + DSP56362EVMUPGR Generic 364EVM: DSP5636XEVM + SPAKB56364ADAPTER Generic 366EVM: DSP5636XEVM + Software 366EVM: DSP5636XEVM + SPAK(D)56366PV120 Generic 367EVM: DSP5636XEVM + SPAKB56367PV150 Software 367EVM: DSP5636XEVM + SPAKA56367PV150	Low cost, high performance processing. Extensive software library. Dolby Digital, DTS and MPEG decoding with auto-detection and auto-switching on chip. General purpose version available for non-audio customers or customers supplying their own proprietary software. Provides system on a chip decreasing time to market and increasing product value. Software reuse through various applications.

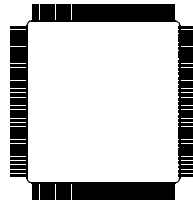
*Contact your local Motorola Sales Office or authorized Motorola distributor for availability.

**Dolby and DTS Software Licenses are Required

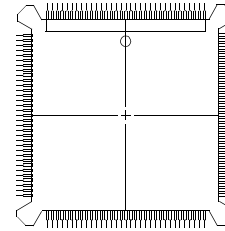
Device Packages



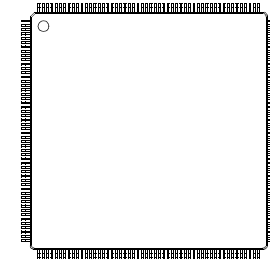
Low-Profile Quad Flat Package (LQFP)
BU Suffix
100-Pin / Case No. 983



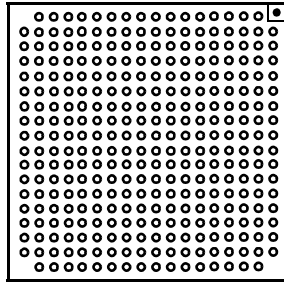
Low-Profile Quad Flat Package (LQFP)
PV Suffix
144-Pin / Case No. 918



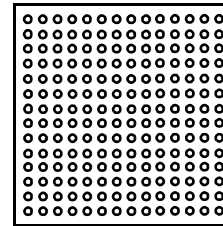
Plastic Quad Flat Package
FC Suffix
132-Pin / Case No. 831A



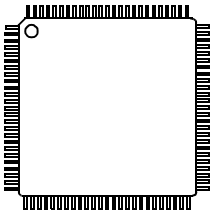
Low-Profile Quad Flat Package (LQFP)
PW Suffix
208-Pin / Case No. 998



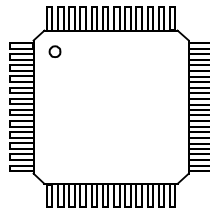
Mold Array Process Ball Grid Array Package
(MAPBGA)
196-ball / Case No. 1128C-01



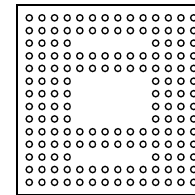
Mold Array Process Ball Grid Array Package
(MAPBGA)
252-ball / Case No. 996E-01



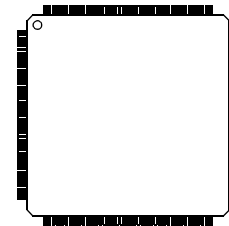
Low-Profile Quad Flat Package
100-pin / Case No. 842F



Low-Profile Quad Flat Package (LQFP)
48-pin / Case No. 932



Plastic Ball Grid Array (MAPBGA)
160-pin / Case No. 1268



Low-Profile Quad Flat Package
(LQFP)
160-pin / Case No. 1259

56800 Software Modules

Application/Module	56F801	56F803	56F805	56F807	56824	56F826
Vocoders						
G.165	✓	✓	✓	✓	✓	✓
G.711	✓	✓	✓	✓	✓	✓
G.726	✓	✓	✓	✓	✓	✓
Modems						
V.8bis	✓	✓	✓	✓	✓	✓
V.22bis	✓	✓	✓	✓	✓	✓
V.42bis	✓	✓	✓	✓	✓	✓
Telephony						
DTMF Generate	✓	✓	✓	✓	✓	✓
DTMF Detect	✓	✓	✓	✓	✓	✓
Caller ID	✓	✓	✓	✓	✓	✓
Call Progress Tones (CPT)	✓	✓	✓	✓	✓	✓
Voice Activity Detect (VAD)	✓	✓	✓	✓	✓	✓
CAS Detection	✓	✓	✓	✓	✓	✓
Acoustic Echo Cancellor	✓	✓	✓	✓	✓	✓

56800 Software Modules (Continued)

Application/Module	56F801	56F803	56F805	56F807	56824	56F826
Security						
DES	✓	✓	✓	✓	✓	✓
3DES	✓	✓	✓	✓	✓	✓
DSP Functions						
Fractional Math	✓	✓	✓	✓	✓	✓
FFT	✓	✓	✓	✓	✓	✓
FIR	✓	✓	✓	✓	✓	✓
IIR	✓	✓	✓	✓	✓	✓
Trigonometric	✓	✓	✓	✓	✓	✓
Matrix	✓	✓	✓	✓	✓	✓
Vector	✓	✓	✓	✓	✓	✓
Correlation	✓	✓	✓	✓	✓	✓
Miscellaneous						
Serial Bootloader	✓	✓	✓	✓		✓
Narrowband Filter Demo					✓	✓
Data structures (FIFO)	✓	✓	✓	✓	✓	✓

56800 Software Modules (Continued)

Application/Module	56F801	56F803	56F805	56F807	56824	56F826
Motor Control Applications						
AC Induction Motors (ACIM) V/Hz Open Loop		✓	✓	✓		
AC Induction Motors (ACIM) V/Hz Open Loop, PFC		✓	✓	✓		
AC Induction Motors (ACIM) V/Hz Closed Loop		✓	✓	✓		
Brushless DC Motors w/ HALL Sensors Closed Loop		✓	✓	✓		
Brushless DC Motors w/ Encoder		✓	✓	✓		
Sensorless Brushless DC Motors w/ Back-EMF ADC		✓	✓	✓		
Sensorless Brushless DC Motors w/ Back-EMF ZC		✓	✓	✓		
Synchronous Perm Mag Closed Loop w/ Encoder		✓	✓	✓		
Low-End SR w/ Position Sensor - Hall Sensors		✓	✓	✓		
Digital Power Factor Correction		✓	✓	✓		
PC Master	✓	✓	✓	✓		✓

56800 Software Modules (Continued)

Application/Module	56F801	56F803	56F805	56F807	56824	56F826
Motor Control Algorithms						
Vector Limitation Rotation	✓	✓	✓	✓		
3-phase Sine Waveform Generation	✓	✓	✓	✓		
Clarke/Park Transformation	✓	✓	✓	✓		
Space Vector Modulation	✓	✓	✓	✓		
Ramp	✓	✓	✓	✓		
D-Q System(2 phase)	✓	✓	✓	✓		
FOC decoupling	✓	✓	✓	✓		
BLDC Commutation Handler w/ Sensors	✓	✓	✓	✓		
BLDC Commutation Sensorless - Back-EMF Measurement	✓	✓	✓	✓		
BLDC commutation Handler sensorless - Zero Crossing	✓	✓	✓	✓		
SR Commutation Handler	✓	✓	✓	✓		
Speed push button	✓	✓	✓	✓		
PI/PID Controllers	✓	✓	✓	✓		
Velocity Calculation and Estimation	✓	✓	✓	✓		

56800 Software Modules (Continued)

Application/Module	56F801	56F803	56F805	56F807	56824	56F826
Motor Control Algorithms (continued)						
Look-up Table	✓	✓	✓	✓		
Brake Control	✓	✓	✓	✓		
Switch Control	✓	✓	✓	✓		
Board Identification		✓	✓	✓		

✓ = available

Motorola DSP Device Literature *

Device	Item	Reference
DSP56300 Family	Family Manual	DSP56300FM/AD
DSP56301	Data Sheet User's Manual Product Brief	DSP56301/D DSP56301UM/AD DSP56301P/D
DSP56303	Data Sheet User's Manual Product Brief	DSP56303/D DSP56303UM/AD DSP56303P/D
DSP56L307	Data Sheet User's Manual Product Brief	DSP56L307/D DSP56L307UM/AD DSP56L307P/D
DSP56309	Data Sheet User's Manual Product Brief	DSP56309/D DSP56309UM/AD DSP56309P/D
DSP56002EVM	Product Brief	DSP56002EVMP/D
DSP56303EVM	Product Brief	DSP56303EVMP/D
DSP56L307EVM	Product Brief	DSP56L307EVMP/D
DSP56309EVM	Product Brief	DSP56309EVMP/D
DSP56311	Data Sheet User's Manual Product Brief	DSP56311/D DSP56311UM/AD DSP56311P/D
DSP56362	Data Sheet User's Manual Product Brief Chip Errata	DSP56362/D DSP56362UM/AD DSP56362P/D DSP56324CE
DSP56364	Data Sheet User's Manual Product Brief Chip Errata	DSP56364/D DSP56364UM/AD DSP56364P/D DSP56364CE

Motorola DSP Device Literature (Continued)*

Device	Item	Reference
DSP56366	Product Brief Data Sheet	DSP56366PB/D DSP56366/D
DSP56367	Product Brief	DSP56367PB/D
DSP56800	Family Manual	DSP56800FM/D
DSP56824	Data Sheet User's Manual Product Brief	DSP56824/D DSP56824UM/D DSP565824
DSP56F801/803/805/807	User's Manual	DSP56F801-7UM/D
DSP56F826/827	User's Manual	DSP56F826-827UM/D
DSP56F801	Product Brief Data Sheet	DSP56F801PB/D DSP56F801/D
DSP56F803	Product Brief Data Sheet Chip Errata	DSP56F803PB/D DSP56F803/D DSP56F803E/D
DSP56F805	Product Brief Data Sheet Chip Errata	DSP56F805PB/D DSP56F805/D DSP56F805E/D
DSP56F807	Product Brief Data Sheet	DSP56F807PB/D DSP56F807/D
DSP56F826	Product Brief Data Sheet	DSP56F826PB/D DSP56F826/D
DSP56F827	Product Brief	DSP56F827PB/D
DSP56800E	Reference Manual	DSP56800ERM/D

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DSP Development Tools

Part Number	Description	Remarks
DSP56800 Software		
DSPTOOLSCD	DSP56800 Family Simulator/Assembler/Linker/Librarian/C Compiler for IBM PC™, SUN-4 and Hewlett-Packard Series 700	Version 6.2
CE-DSP3.5	Metrowerks for Motorola DSP integrated development environment supporting Motorola's DSP56800 family	Available now
MSW3SDK000AA	Embedded software development kit (SDK) for use with DSP products. Includes PC-Master tool.	Available now. Download from: www1.motorola.com/motor/devtools/sdk.html
**	Embedded software development kit (SDK) for use with MCU products. Includes PC-Master tool.	--
DSP56300 Software		
DSPTOOLSCD	DSP56300 Family Simulator/Assembler/Linker/Librarian/C Compiler for IBM PC, SUN-4 and Hewlett-Packard Series 700	Version 6.2
DSP56300CD/D	This CD provides essential information to help you quickly become proficient with devices in the DSP56300 family.	
DSP56800 Hardware		
DSP56824ADSA DSP56824EVM	DSP56824 Development System for the IBM PC DSP56824 Evaluation Module Kit	Version 6.1 6.1
DSP56F801EVM	Evaluation kit for the DSP56F801 processor	
DSP56F803EVM	Evaluation kit for the DSP56F803 processor	Available now
DSP56F805EVM	Evaluation kit for the DSP56F805 processor	Available now
DSP56F807EVM	Evaluation kit for the DSP56F807 processor	Available now
DSP56F826EVM	Evaluation kit for the DSP56F826 processor	
DSP56F827EVM	Evaluation kit for the DSP56F827 processor	

DSP Development Tools (Continued)

Part Number	Description	Remarks
DSPCOMMAND	Emulation support for DSP56F80X processors. Requires ISA slot.	Available now
DSPCOMMPARALLEL	Emulation support for DSP56F80X processors. Requires parallel port.	Available now
DSPCOMMANDPCI	Emulation support for DSP56F80X processors. Requires PCI slot.	Consult Web or Metrowerks for availability of CodeWarrior software support
DSPCOMMETHERNET	Emulation support for DSP56F80X processors. Requires Ethernet network.	Consult Web or Metrowerks for availability of CodeWarrior software support
DSP56300 Hardware		
DSP56301ADSA DSP56301ADSF DSP56303EVM DSP56L307EVM DSP56309EVM DSP56311EVM DSP5636XEVM	DSP56301 Development System for IBM PC DSP56301 Development System for SUN-4 DSP56303 Evaluation Module Including Software DSP56L307 Evaluation Module Including Software DSP56309 Evaluation Module Including Software DSP56311 Evaluation Module Including Software DSP5636X Evaluation Module Including Software, Debugger and PPI cable	For use with 56362,4,6,7 generic or software devices
Universal Hardware		
DSPPCHOST DSPSUN4HOST DSPCOMMAND DSPCOMMANDPCI DSPCOMMPARALLEL	PC Compatible Host Board and Interface Software SUN-4 Host Board and Interface Software 16- and 24- Bit Command Converter Board 16- and 24- Bit Command Converter Board for PCI Interface 16- and 24- Bit Command Converter Board for Parallel Interface	Version 2.0 2.0 6.1 1.0 1.0

Terms


AC	Alternating Current	ITU	International Telecommunications Union
AC3	Project name for Dolby Digital Decoder	LDC	Literature Distribution Center
ADC	Analog to Digital Converter	LQFP	Low-Profile Quad Flat Package
ALU	Arithmetic Logic Unit	MFT	Multi-Function Timer
ATM	Asynchronous Transfer Mode	MIPS	Million Instructions per Second
BLDC	Brushless DC	MOQ	Minimum Order Quantity
CAN	Controller Area Network	MPEG	Motion Picture Experts Group (compression standard)
CDMA	Code Division Multiple Access	OnCE	On-Chip Emulation Port/Module
Ch	Channel	P	In Production
Codec	Compression/Decompression (algorithm)	PBGA	Plastic Ball Grid Array
COP	Computer Operating Properly (Watch Dog Timer)	PCM	Pulse Code Modulation
DC	Direct Current	PLL	Phase-Lock Loop
DES	Data Encryption Standard (USA)	PPP	Post Processing Phase
DTS	Digital Theater Systems	PQFP	Plastic Quad Flat Package
DTV	Digital Television	PWM	Pulse Width Modulator
DVD	Digital Video Disk	S	Samples available
EFCOP	Enhanced Filter Co-Processor	SCI	Serial Communications Interface (asynchronous)
EMI	External Memory Interface	SHI	Serial Host Interface
ESAI	Enhanced Serial Audio Interface	SPI	Serial Peripheral Interface
FFT	Fast Fourier Transform	SR	Switched Reluctance
Freq	Frequency in megahertz	SSI	Single-Step Instruction
GPIO	General-Purpose I/O	THX	Lucasfilm sound processing algorithm
GSM	Ground Station Mobile	TQFP	Thin Quad Flat Package
HI08	8 bit Host Interface	USB	Universal Serial Bus

Terms

AC	Alternating Current	ITU	International Telecommunications Union
AC3	Project name for Dolby Digital Decoder	LDC	Literature Distribution Center
I/O	Bidirectional Input and Output Port Pins	WWW	World Wide Web
IP	Internet Protocol		

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