



Freescale - MPC5566EVB - MPC55xxEVB Evaluation Kit

Product Overview:

The MPC55xxEVB Evaluation Kits include everything necessary to begin development with the MPC55xx family of microcontrollers. A comprehensive set of hardware and software development tool options are available including a free a flash programmer, initialization tools, and assembly level debug tool.



Kit Contents:

- Tools Include:
 - USB POWERPC NEXUS MULTILINK
- Compiler Only
 - CodeWarrior (Demo Software)
- Full IDE (Demo Software Only)
 - Green Hills
 - iSYSTEM (GNU other compilers)
 - P&E Micro (GNU compiler + free 64k debugger)
 - Lauterbach
 - Ashling (GNU compiler)
- Initialization Software
 - Treck Ethernet Stack (Demo Software)

Key Features:

- Breadboard area, access to all signals
- Nexus Connectors (MICTOR and 14-pin Berg). Footprint for Robust Connector
- 32-channel eTPU connector

- 1 CAN with PHY (Auto Temp Qualified)
- 1 LIN Transceiver with PHY
- 1 RS-232 Transceiver with PHY
- 8 LED
- 4 push buttons – 1 with hardware debounce, 8 SPST switches
- 2 Potentiometers
- 1 Audio Speaker with amplifier
- UNI-3 Motor Interface connector plus sensor connector
- MPC5554EVB & MPC5567EVB - 128Kx32 external SRAM
- MPC5553EVB & MPC5534EVB - 256Kx16 external SRAM
- MPC5553EVB - 10/100 Ethernet with PHY (National Semiconductor's PHY, DP83848YB, available in -40 to 125°C)
- MPC5567EVB - Connectors and Transceivers for dual-channel FlexRay
- MPC5566EVB - Has the same features as the MPC5553 EVB and the same schematics

Ordering Information:

Products:

Part Number	Manufacturer	Farnell P/N	Newark P/N
MPC5566EVB	Freescale	1692121	51M5621
MPC5566EVB.	Freescale	1642334	NA

Associated Products:

Part Number	Manufacturer	Description	Farnell P/N	Newark P/N
SPC4800	SPC Technology	USB 2.0 Cable Assembly	4556604	83K3790
SPC19944	SPC Technology	Shielded Serial Cable Assembly	1702769	83K3689
CWA-STANDARD-N	Freescale	Software, suite licence, c/w, standard	1750496	26R5712
USBMLCF	Freescale	USB ColdFire Multilink	1535884	01M6486
MPC5566MVR132	Freescale	32-bit PowerPC Microcontrollers	NA	09P4174
SN74CBTLV3861DW	TI	Low-Voltage 10-Bit FET Bus Switch	1741497	76C2993
TPA4861DR	TI	Audio Power Amplifier IC	1535752	76C9815
TPA4861D	TI	Audio Power Amplifier IC	8456526	35K1280
HIN202CBZ	Intersil	RS-232 Transmitters/Receivers	9663444	24M2627

HIN202ECBNZ	Intersil	RS-232 Transmitters/ Receiver	9663452	24M2629
SN74LV125APW	TI	Quad buffer/line driver 3-state	9592512	22H0425
MC33661D	Freescale	Local Area Network (LIN) Enhanced Physical Interface with Selectable Slew Rate	NA	09J5391
SN74CBT16211ADL	TI	Switch Logic IC	1740137	94B4081
DP83848IVV/NOPB	NS	Ethernet Transceiver	1654352	69K2089
LMC7221AIM/NOPB	NS	Tiny CMOS Comparator	1685315	41K2728
SN74AC86D	TI	Quadruple 2-Input Exclusive-OR Gates	1287469	36K3547
NC7SZ08P5	Fairchild	Tiny Logic UHS 2-Input AND Gate	1607787	34C1562
SPC4800	SPC Technology	USB 2.0 Cable Assembly	4556604	83K3790

Similar Products:

Part Number	Manufacturer	Description	Support Device	Farnell P/N	Newark P/N
MPC5534EVBE	Freescale	MPC55xx Evaluation Board	MPC5534, MPC5553, MPC5554	1692092	14M6281
MPC5534EVBE.	Freescale	MPC55xx Evaluation Board	MPC5534, MPC5553, MPC5554	NA	NA
MPC5554EVB	Freescale	MPC55xx Evaluation Board	MPC5534, MPC5553, MPC5554	1579884	NA
MPC5553EVB	Freescale	MPC55xx Evaluation Board	MPC5553	1692121	NA
MPC5567EVB	Freescale	MPC55xx Evaluation Board	MPC55XX	NA	01M6036

Document List:

Datasheets:

Part Number	Description	Size
MPC5566	MPC5566 Microcontroller Data Sheet	1.31MB

SN74CBTLV3861-Q1	Low-Voltage 10-Bit FET Bus Switch	123KB
IS61SF25618	256K x 16, 256K x 18 Synchronous Flow-through static RAM	108KB
TPA4861	TPA4861: 1-W Mono Audio Power Amplifier	623KB
HIN202	+5V Powered RS-232 Transmitters/Receivers with 0.1Microfarad External Capacitors	493KB
74LV125	74LV125 Quad buffer/line driver 3-state	906KB
MC33394	MC33394 Data Sheet	642KB
MC33661D	Local Area Network (LIN) Enhanced Physical Interface with Selectable Slew Rate	542KB
SN74CBT16211A	SN74CBT16211A Data Sheet	484KB
DP83848	DP83848VYB PHYTER® - Extended Temperature Single Port 10/100 Mb/s Ethernet Physical Layer Transceiver	148KB
LMC7221	LMC7221 - Tiny CMOS Comparator with Rail-to-Rail Input and Open Drain Output	703KB
SN74AC86	Quadruple 2-Input Exclusive-OR Gates	709KB
NC7SZ08P5	TinyLogic UHS 2-Input AND Gate	536KB
SN54ACT573	SN54ACT573, SN74ACT573 OCTAL D-Type Transparent Latches Datasheet	524KB
SN74LVC2G125	SN74LVC2G125 Dual Bus Buffer Gate Datasheet	348KB

Application Notes:

File Name	Size
AN3787 Preventing Device Lockout via Censorship on MPC55xx and MPC563x Families	348KB
AN3215 : Interfacing MPC55xx Microcontrollers to the MFR4200 FlexRay Controller	608KB
AN3007 : BLDC Motor with Speed Closed Loop and DC-Bus Break Controller, driven by eTPU on MPC5554	2.2MB
AN2859SW_FPM Frequency Pulse Measurement (FPM) eTPU Function API	2KB
AN2858SW_PPA Pulse Period Accumulate (PPA) eTPU Function API	2KB

Hardware & Software:

File Name	Size
Evaluation: CodeWarrior for ColdFire Architectures	301MB
CodeWarrior for ColdFire v7.1.2 Patch	162MB
Evaluation: CodeWarrior for ColdFire Architectures	301.6MB
CodeWarrior for ColdFire v7.1.2 Patch	161.9MB
Processor Expert - CodeWarrior for MPC55XX	56MB
MPC5500_GAP_TOOL	8.4MB
RAppID Version 2.2.0.7 IDE - Debug, Compile and Build Tools	283MB
MPC55XX_EEPROM_EMULATION_DRIVER	4.45MB

MPC55XX FLASH DRIVER	4.9MB
FreeMASTER Communication Driver	4.3MB
MPC5553 RAppID Demo Rapid Application Initialization and Documentation Tool	55.3MB
MPC5554 Processor Expert Init Tool	18.7MB
MPC55xx SPE DSP Library 1	451KB
MPC55xx SPE DSP Library 2	2.5MB