

**CURRENT PRODUCTS – STANDARD MICROCONTROLLER FAMILIES**

Part Number	Program Memory Type					Prog. (Bytes)	RAM (Bytes)	Data E2PROM (Bytes)	A/D Inputs	Timer Functions			Serial Interface	LVD levels	I/Os (High Current5)	Packages	Supply Voltage	Auto Motive	Special Features
	Flash	OTP	FAST ROM1)	ROM	EPROM					16-Bit (IC/OC/PWM)	8-Bit (IC/OC/PWM)	Others							
<b>µPSD Flash Programmable System Device with 8032 Microcontroller Core</b>																			
<b>Standard uPSD</b>																			
3V	<a href="#">uPSD3212CV</a>					80K	2K		4x8-bit	1,2,0	0,2,5	WDG	2x UART, I2C, DDC	1	37/46	TQFP52/80	3.0–3.6 V	N	PLD, JTAG ISP
	<a href="#">uPSD3233BV</a>					160K	8K		4x8-bit	1,2,0	0,2,5	WDG	2x UART, I2C, DDC	1	37/46	TQFP52/80	3.0–3.6 V	N	PLD, JTAG ISP
	<a href="#">uPSD3234BV</a>					288K	8K		4x8-bit	1,2,0	0,2,5	WDG	2x UART, I2C, DDC	1	37/46	TQFP52/80	3.0–3.6 V	N	PLD, JTAG ISP
5V	<a href="#">uPSD3212C</a>					80K	2K		4x8-bit	1,2,0	0,2,5	WDG	2x UART, I2C, DDC	1	37/46	TQFP52/80	4.5–5.5 V	N	PLD, JTAG ISP
	<a href="#">uPSD3233B</a>					160K	8K		4x8-bit	1,2,0	0,2,5	WDG	2x UART, I2C, DDC	1	37/46	TQFP52/80	4.5–5.5 V	N	PLD, JTAG ISP
<b>Standard uPSD w/ 32KB SRAM</b>																			
3V	<a href="#">uPSD3253BV</a>					160K	32K		4x8-bit	1,2,0	0,2,5	WDG	2x UART, I2C, DDC	1	37/46	TQFP52/80	3.0–3.6 V	N	PLD, JTAG ISP
	<a href="#">uPSD3254BV</a>					288K	32K		4x8-bit	1,2,0	0,2,5	WDG	2x UART, I2C, DDC	1	46	TQFP80	3.0–3.6 V	N	PLD, JTAG ISP
5V	<a href="#">uPSD3253B</a>					160K	32K		4x8-bit	1,2,0	0,2,5	WDG	2x UART, I2C, DDC	1	37	TQFP52	4.5–5.5 V	N	PLD, JTAG ISP
<b>Standard uPSD w/USB</b>																			
5V	<a href="#">uPSD3212A</a>					80K	2K		4x8-bit	1,2,0	0,2,5	WDG	2x UART, I2C, DDC, USB	1	37/46	TQFP52/80	4.5–5.5 V	N	PLD, JTAG ISP, Low-speed USB 2.0
	<a href="#">uPSD3234A</a>					288K	8K		4x8-bit	1,2,0	0,2,5	WDG	2x UART, I2C, DDC, USB	1	37/46	TQFP52/80	4.5–5.5 V	N	PLD, JTAG ISP, Low-Speed USB 2.0
<b>Standard uPSD w/USB and 32KB SRAM</b>																			
5V	<a href="#">uPSD3254A</a>					288K	32K		4x8-bit	1,2,0	0,2,5	WDG	2x UART, I2C, DDC, USB	1	37/46	TQFP52/80	4.5–5.5 V	N	PLD, JTAG ISP, Low-Speed USB 2.0
<b>Turbo Plus uPSD w/USB – 9 MIPs</b>																			
3V	<a href="#">UPSD3422EV</a>					80K	4K		8x10-bit	1,2,6	6,8,6	WDG	2x UART, USB, I2C, SPI, IrDA	1	36/45 (8)	TQFP52/80	3.0 to 3.6	N	JTAG Emulation/Debug, PLD, Full Speed USB 2.0
	<a href="#">UPSD3433EV</a>					160K	8K		8x10-bit	1,2,6	6,8,6	WDG	2x UART, USB, I2C, SPI, IrDA	1	36/45 (8)	TQFP52/80	3.0 to 3.6	N	JTAG Emulation/Debug, PLD, Full Speed USB 2.0
	<a href="#">UPSD3434EV</a>					288K	8K		8x10-bit	1,2,6	6,8,6	WDG	2x UART, USB, I2C, SPI, IrDA	1	36/45 (8)	TQFP52/80	3.0 to 3.6V	N	JTAG Emulation/Debug, PLD, Full Speed USB 2.0
5V	<a href="#">UPSD3422E</a>					80K	4K		8x10-bit	1,2,6	6,8,6	WDG	2x UART, USB, I2C, SPI, IrDA	1	36/45 (8)	TQFP52/80	4.5 to 5.5V	N	JTAG Emulation/Debug, PLD, Full Speed USB 2.0
	<a href="#">UPSD3433E</a>					160K	8K		8x10-bit	1,2,6	6,8,6	WDG	2x UART, USB, I2C, SPI, IrDA	1	36/45 (8)	TQFP52/80	4.5 to 5.5V	N	JTAG Emulation/Debug, PLD, Full Speed USB 2.0
	<a href="#">UPSD3434E</a>					288K	8K		8x10-bit	1,2,6	6,8,6	WDG		1	36/45 (8)	TQFP52/80	4.5 to 5.5V	N	

8-BIT µPSD

																			2x UART, USB, I2C, SPI, IrDA				JTAG Emulation/Debug, PLD, Full Speed USB 2.0											
<b>Turbo uPSD – 6 MIPs</b>																																		
3V	<a href="#">uPSD3312DV</a>						80K	2K		8x10-bit	1,2,6	6,8,6	WDG	2x UART, I2C, SPI, IrDA	1	36 (8)	TQFP52	3.0–3.6 V	N	PLD, JTAG ISP/DEBUG														
	<a href="#">uPSD3333DV</a>						160K	8K		8x10-bit	1,2,6	6,8,6	WDG	2x UART, I2C, SPI, IrDA	1	36/45 (8)	TQFP52/80	3.0–3.6 V	N	PLD, JTAG ISP/DEBUG														
	<a href="#">uPSD3334DV</a>						288K	8K		8x10-bit	1,2,6	6,8,6	WDG	2x UART, I2C, SPI, IrDA	1	45 (8)	TQFP80	3.0–3.6 V	N	PLD, JTAG ISP/DEBUG														
5V	<a href="#">uPSD3312D</a>						80K	2K		8x10-bit	1,2,6	6,8,6	WDG	2x UART, I2C, SPI, IrDA	1	36 (8)	TQFP52	4.5–5.5 V	N	PLD, JTAG ISP/DEBUG														
	<a href="#">uPSD3333D</a>						160K	8K		8x10-bit	1,2,6	6,8,6	WDG	2x UART, I2C, SPI, IrDA	1	36/45 (8)	TQFP52/80	4.5–5.5 V	N	PLD, JTAG ISP/DEBUG														
	<a href="#">uPSD3334D</a>						288K	8K		8x10-bit	1,2,6	6,8,6	WDG	2x UART, I2C, SPI, IrDA	1	45 (8)	TQFP80	4.5–5.5 V	N	PLD, JTAG ISP/DEBUG														
<b>Turbo uPSD w/ 32KB SRAM – 6 MIPs</b>																																		
3V	<a href="#">uPSD3354DV</a>						288K	32K		8x10-bit	1,2,6	6,8,6	WDG	2x UART, I2C, SPI, IrDA	1	36/45 (8)	TQFP52/80	3.0–3.6 V	N	PLD, JTAG ISP/DEBUG														
5V	<a href="#">uPSD3354D</a>						288K	32K		8x10-bit	1,2,6	6,8,6	WDG	2x UART, I2C, SPI, IrDA	1	36/45 (8)	TQFP52/80	4.5–5.5 V	N	PLD, JTAG ISP/DEBUG														

ADC	=	Analog to Digital Converter
ART	=	Auto-Reload Timer
BLPD	=	Byte Level Protocol Decoder
BOD	=	Brown Out Detector
CAN	=	Controller Area Network
CAPCOM	=	Capture Compare
DALI	=	Digital Addressable Lighting Interface
DSC	=	Dual Supply Control
DTC	=	Data Transfer Coprocessor
IAP	=	In-Application Programming
IC/OC	=	Input Capture/Output Compare
ICP	=	In-Circuit Programming
IR	=	InfraRed
ISP	=	In-Situ Programming
I2C	=	Inter Integrated Circuit
LCD	=	Liquid Crystal Display
LIN	=	Local Interconnect Network
LVD	=	Low Voltage Detection
MAC	=	Multiply Accumulator
MC	=	Motor Control
MFT	=	Multifunction Timer
NMI	=	Non Maskable Interrupt

<b>Abbreviations</b>	
OSG	= Oscillator Safeguard
PDR	= Power Down Reset
PHW	= Programmable Halt Wake-up
PEC	= Peripheral Event Controller
PLL	= Phase Locked Loop
POR	= Power On Reset
PVR	= Programmable Voltage Regulator
PWM	= Pulse Width Modulation
ROP	= ReadOut Protection
RTC	= Real Time Clock Timer
SC	= Smart Card
SCI	= Serial Communication Interface (UART)
SCR	= Smartcard Reader
SPI	= Serial Peripheral Interface
SSC	= Single-Cycle Switching Support
SSP	= Synchronous Serial Port
TBU	= Time Base Unit
UART	= Universal Asynchronous Receiver Transmitter
USART	= Universal Synchr./Asynchr. Receiver Transmitter
USB	= Universal Serial Bus
WDG	= Watchdog Timer
WWDG	= Windows Watchdog Timer

<b>Packages</b>	
DIP	= Dual In Line
LCC	= Leaded Chip Carrier
PQFP	= Plastic Quad Flat Pack
PQFP	= Plastic Quad Flat Pack
SDIP	= Shrink Dual In Line
SO	= Small Outline
SSOP	= Shrink small outline package
TQFP	= Thin Quad Flat Pack
PBGA	= Plastic Ball Grid Array
To get more information: * ST Corporate Website : <a href="http://www.st.com/">http://www.st.com/</a>	

<b>Notes</b>	
	Under development
1.	Factory Advanced Service Technique ROM
2.	The device exists in low voltage version
3.	The device exists in B version only (without LVD and OSG)
4.	Audio square wave generator
5.	Number of high current pins included in the number of I/O pins
6.	HDFlash (High Density Flash)
7.	XFlash (Extended Flash)
8.	Low voltage version planned: 3.0V to 3.6V
9.	1x8-Bit (1/0/0) and 1x12-Bit (0/1/1)
10.	1x8-Bit (1/0/0) and 1x12-Bit (1/1/4)
11.	A second PWM is available but with fixed frequency