

# CATALYST Digitally Programmable Potentiometers



RoHS Compliant This product is RoHS compliant.

## CATALYST 32 AND 100 TAP CONFIGURED DIGITALLY PROGRAMMABLE POTENTIOMETERS (DPP™)

- Features:**
- 32 position linear taper
  - Nonvolatile wiper position storage
  - Low power CMOS technology
  - Single supply operation: 2.5V to 6.0V
  - Increment up/down control
  - Buffered output, CAT5111 & CAT5112
  - Resistor values: 10kΩ, 50kΩ and 100kΩ
- ◆ Surface Mount Device

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.		Package	Supply Range (V)	Type	Taps	Resistance Option (kΩ)	Buffered Wiper	Digital Interface	Supply Type	Price Each			
Mfr.	Mfr. Part No.									1	25	100	250
◆	698—CAT5114LI-10	PDIP-8	2.5 to 6.0	Single	32	10	No	Increment/Decrement	Single	1.71	1.36	1.28	1.20
◆	698—CAT5114VI-10	SOIC-8	2.5 to 6.0	Single	32	10	No	Increment/Decrement	Single	1.68	1.34	1.26	1.18
◆	698—CAT5114ZI-10	MSOP-8	2.5 to 6.0	Single	32	10	No	Increment/Decrement	Single	1.74	1.38	1.30	1.22
◆	698—CAT5112VI-10	SOIC-8	2.5 to 6.0	Single	32	10	Yes	Increment/Decrement	Single	2.45	1.96	1.84	1.71
◆	698—CAT5110TBI-50T	SOT-23	2.5 to 6.0	Single	32	50	No	Increment/Decrement	Single	.66	.53	.50	.46
◆	698—CAT5118TBI-50	SOT-23	2.5 to 6.0	Single	32	50	No	Increment/Decrement	Single	.66	.53	.50	.46
◆	698—CAT5119TBI-50	SOT-23	2.5 to 6.0	Single	32	50	No	Increment/Decrement	Single	.66	.53	.50	.46
◆	698—CAT5114LI-00	PDIP-8	2.5 to 6.0	Single	32	100	No	Increment/Decrement	Single	1.71	1.36	1.28	1.20
◆	698—CAT5114VI-00	SOIC-8	2.5 to 6.0	Single	32	100	No	Increment/Decrement	Single	1.68	1.34	1.26	1.18
◆	698—CAT5110TBI-00T	SOT-23	2.5 to 6.0	Single	32	100	No	Increment/Decrement	Single	.66	.53	.50	.46
◆	698—CAT5118TBI-00	SOT-23	2.5 to 6.0	Single	32	100	No	Increment/Decrement	Single	.66	.53	.50	.46
◆	698—CAT5119TBI-00	SOT-23	2.5 to 6.0	Single	32	100	No	Increment/Decrement	Single	.66	.53	.50	.46
◆	698—CAT5113LI-10	PDIP-8	2.5 to 6.0	Single	100	10	No	Increment/Decrement	Single	2.73	2.18	2.05	1.91
◆	698—CAT5113VI-10	SOIC-8	2.5 to 6.0	Single	100	10	No	Increment/Decrement	Single	2.70	2.16	2.03	1.89
◆	698—CAT5113ZI-10	MSOP-8	2.5 to 6.0	Single	100	10	No	Increment/Decrement	Single	2.76	2.20	2.07	1.93
◆	698—CAT5113YI-10	TSSOP-8	2.5 to 6.0	Single	100	10	No	Increment/Decrement	Single	2.70	2.16	2.03	1.89
◆	698—CAT5113VI-00	SOIC-8	2.5 to 6.0	Single	100	100	No	Increment/Decrement	Single	2.70	2.16	2.03	1.89
◆	698—CAT5113YI-00	TSSOP-8	2.5 to 6.0	Single	100	100	No	Increment/Decrement	Single	2.70	2.16	2.03	1.89

## CATALYST 256 TAP CONFIGURED DIGITALLY PROGRAMMABLE POTENTIOMETER (DPP™)

- Features:**
- Direct WRITE and READ wiper settings
  - Buffered wipers
  - Independent reference terminal inputs, CAT525
  - Rail-to-rail output range
  - Single supply operation: 2.7V to 5.5V
  - 3-wire serial interface
  - 8-bit resolution or 256 tap positions
  - Four (4) independently addressable wipers
  - Nonvolatile wiper position storage
- For quantities of 500 and up, call for quote.

MOUSER STOCK NO.		Package	Supply Range (V)	Type	Taps	Resistance Options (kΩ)	Buffered Wiper	Independent Reference Input	Digital Interface	Supply Type	Price Each			
Mfr.	Mfr. Part No.										1	25	100	250
◆	698—CAT524WI	SOIC-14	2.7 to 5.5	Quad	256	28	Yes	No	3-Wire Single	Single	5.60	4.48	4.20	3.92
◆	698—CAT525WI	SOIC-20	2.7 to 5.5	Quad	256	28	Yes	Yes	3-Wire Single	Single	6.10	4.88	4.58	4.27

## CATALYST μP SUPERVISORY CIRCUITS WITH WATCHDOG TIMER AND SERIAL EEPROM

- Supervisory Functions:**
- Power Supply Voltage Supervisor
    - Issues reset signal if power supply fails or is out of tolerance
    - Insures μ C operates with power supply voltage
  - -Power-On reset and brownout protection
  - Watchdog Timer (CAT1161, CAT1163)
    - Restarts microcontroller/ASIC that has stalled because of a hardware or software failure
- Memory Functions:**
- 16K bit EEPROM Memory
  - 400kHz I<sup>2</sup>C Interface
  - 10ms maximum write time
  - 16 byte page write buffer
  - Hardware write protection
- Supervisor with Memory Advantages:**
- Replaces two ICs with one
  - Reduced PCB footprint by 50%
  - Low cost
- For quantities of 500 and up, call for quote.

MOUSER STOCK NO.		Package	Reset Level (V)	Operating Voltage	Temperature Range (°C)	Price Each			
Mfr.	Mfr. Part No.					1	25	100	250
<b>μP Supervisory Circuits and 16K-bit I<sup>2</sup>C Serial EEPROM Memory, Write Protect, Manual Reset, Watchdog Timer on SDA</b>									
◆	698—CAT1161WI-25	SOIC-8	2.5	2.5 to 6.0	-40 to +85	1.12	.89	.84	.78
◆	698—CAT1161LI-25	PDIP-8	2.5	2.5 to 6.0	-40 to +85	1.14	.91	.855	.805
◆	698—CAT1161LI-28	PDIP-8	2.8	2.5 to 6.0	-40 to +85	1.14	.91	.855	.805
◆	698—CAT1161WI-42	SOIC-8	4.2	2.5 to 6.0	-40 to +85	1.12	.89	.84	.78
◆	698—CAT1161LI-42	PDIP-8	4.2	2.5 to 6.0	-40 to +85	1.14	.91	.855	.805
◆	698—CAT1161WI-45	SOIC-8	4.5	2.5 to 6.0	-40 to +85	1.12	.89	.84	.78
◆	698—CAT1161LI-45	PDIP-8	4.5	2.5 to 6.0	-40 to +85	1.14	.91	.855	.805
<b>μP Supervisory Circuits and 16K-bit I<sup>2</sup>C Serial EEPROM Memory, Write Protect, Manual Rest</b>									
◆	698—CAT1162WI-45	SOIC-8	4.5	2.5 to 6.0	-40 to +85	1.11	.88	.837	.785
<b>μP Supervisory Circuits and 16K-bit I<sup>2</sup>C Serial EEPROM Memory, Write Protect, Watchdog Timer (WDI Input)</b>									
◆	698—CAT1163WI-30	SOIC-8	3.0	2.5 to 6.0	-40 to +85	1.15	.92	.86	.81
◆	698—CAT1163WI-42	SOIC-8	4.2	2.5 to 6.0	-40 to +85	1.11	.89	.833	.784
◆	698—CAT1163LI-42	PDIP-8	4.2	2.5 to 6.0	-40 to +85	1.14	.91	.858	.80
◆	698—CAT1163LI-45	PDIP-8	4.5	2.5 to 6.0	-40 to +85	1.14	.91	.858	.80
<b>PSupervisory Circuits and 32K-bit I<sup>2</sup>C Serial EEPROM Memory, Manual Reset</b>									
◆	698—CAT1320WI-42	SOIC-8	4.2	2.5 to 6.0	-40 to +85	1.30	1.04	.97	.91

## CATALYST μP SUPERVISORS WITHOUT EEPROM MEMORY

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.		Package	Nominal Threshold (V)	Watchdog Timer	Manual Reset	Output Polarity	Price Each			
Mfr.	Mfr. Part No.						1	25	100	250
◆	698—CAT1232LPV-G	SOIC-8	4.37/4.62	Yes	Yes	Push-Pull, Active LOW/HIGH	.79	.63	.59	.55
◆	698—CAT1832V-G	SOIC-8	2.55/2.88	Yes	Yes	Push-Pull, Active LOW/HIGH	.79	.63	.59	.55
◆	698—CAT809LTBI-T	SOT-23	4.63	No	No	Push-Pull, Active LOW	.38	.30	.29	.27
◆	698—CAT809MTBI-T	SOT-23	4.38	No	No	Push-Pull, Active LOW	.38	.30	.29	.27
◆	698—CAT809RTBI-T	SOT-23	2.63	No	No	Push-Pull, Active LOW	.38	.30	.29	.27
◆	698—CAT809STBI-T	SOT-23	2.93	No	No	Push-Pull, Active LOW	.38	.30	.29	.27
◆	698—CAT809TTBI-T	SOT-23	3.08	No	No	Push-Pull, Active LOW	.38	.30	.29	.27
◆	698—CAT811STBI-T	SOT-143	2.93	No	Yes	Push-Pull, Active LOW	.42	.34	.32	.29

## CATALYST CAT660 DC-DC CONVERTERS

- Features:**
- 100mA output current
  - 8-lead SO and DIP
  - Charge pump: no inductor required
  - Selectable frequency: 10kHz/80kHz
  - Replaces Maxim Max660
  - Replaces Linear Technology LTC 660
  - New Thin TDFN package (4x4mm): 0.8mm maximum height
- For quantities of 500 and up, call for quote.

MOUSER STOCK NO.		Package	Supply Voltage (V)	Temperature Range (°C)	Supply Current (ma) (typ)	Output Current (mA) (min)	Oscillation Frequency (kHz) (typ)	Power Efficiency (%)	Voltage Conversion Eff. % (typ)	Price Each			
Mfr.	Mfr. Part No.									1	25	100	250
◆	698—CAT660ELA	PDIP-8	1.5 to 5.5	-40 to +85	1	100	10 - 80	88 - 98	99.9	2.00	1.60	1.50	1.40
◆	698—CAT660EVA	SOIC-8	1.5 to 5.5	-40 to +85	1	100	10 - 80	88 - 98	99.9	1.60	1.28	1.20	1.12
◆	698—CAT660EZD8	TDFN-8	1.5 to 5.5	-40 to +85	1	100	10 - 80	88 - 98	99.9	1.70	1.36	1.28	1.19

