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## Digitally Controlled Potentiometers (DCPs)

### Non-Volatile

#### Single - 16 Tap

Device	Bus Interface Type	Resistance Options (k $\Omega$ )	V <sub>CC</sub> Range (V)	V+, V-Supply Range (V)	Terminal Voltage Range V <sub>L</sub> to V <sub>H</sub> (V)	Resistance Taper	Wiper Current (mA)	Wiper Resistance ( $\Omega$ )	Standby Current I <sub>SB</sub> ( $\mu$ A)	Package
X9116	3-Wire (Up/Down)	10	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 1	200	1	8 Ld MSOP, 8 Ld SOIC

#### Single - 32 Tap

Device	Bus Interface Type	Resistance Options (k $\Omega$ )	V <sub>CC</sub> Range (V)	V+, V-Supply Range (V)	Terminal Voltage Range V <sub>L</sub> to V <sub>H</sub> (V)	Resistance Taper	Wiper Current (mA)	Wiper Resistance ( $\Omega$ )	Standby Current I <sub>SB</sub> ( $\mu$ A)	Package
X9313	3-Wire (Up/Down)	1, 10, 50	3.0 to 5.5		-V <sub>CC</sub> to +V <sub>CC</sub>	Linear	$\pm$ 1	40	500	8 Ld MSOP, 8 Ld PDIP, 8 Ld SOIC
X9314	3-Wire (Up/Down)	10	3.0 to 5.5		-V <sub>CC</sub> to +V <sub>CC</sub>	Logarithmic	$\pm$ 1	40	500	8 Ld MSOP, 8 Ld PDIP, 8 Ld SOIC
X9315	3-Wire (Up/Down)	10, 50, 100	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 1	200	1	8 Ld MSOP, 8 Ld PDIP, 8 Ld SOIC
X93154	3-Wire (Up/Down)	50	2.7 to 3.3		0 to V <sub>CC</sub>	Linear	$\pm$ 0.6	1k	1	8 Ld DFN, 8 Ld MSOP
X93155	3-Wire (Up/Down)	50	4.5 to 5.5		0 to V <sub>CC</sub>	Linear	0.6	1k	2	8 Ld MSOP
X93156	3-Wire (Up/Down)	12.5, 50	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	0.6	1k	1	8 Ld MSOP
X9511	Push Button	10	4.5 to 5.5		-V <sub>CC</sub> to +V <sub>CC</sub>	Linear	$\pm$ 1	40	200	8 Ld PDIP, 8 Ld SOIC

#### Single - 64 Tap

Device	Bus Interface Type	Resistance Options (k $\Omega$ )	V <sub>CC</sub> Range (V)	V+, V-Supply Range (V)	Terminal Voltage Range V <sub>L</sub> to V <sub>H</sub> (V)	Resistance Taper	Wiper Current (mA)	Wiper Resistance ( $\Omega$ )	Standby Current I <sub>SB</sub> ( $\mu$ A)	Package
X9428	2-Wire	2.5, 10	2.7 to 5.5	-5.5 to -2.7	V- to V <sub>CC</sub>	Linear	$\pm$ 6	150	1	14 Ld TSSOP, 16 Ld PDIP, 16 Ld SOIC
X9429	2-Wire	2.5, 10	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 3	250	5	14 Ld TSSOP, 16 Ld SOIC, 18 Ld PDIP

**Single - 100 Tap**

Device	Bus Interface Type	Resistance Options (k $\Omega$ )	V <sub>CC</sub> Range (V)	V+, V-Supply Range (V)	Terminal Voltage Range V <sub>L</sub> to V <sub>H</sub> (V)	Resistance Taper	Wiper Current (mA)	Wiper Resistance ( $\Omega$ )	Standby Current I <sub>SB</sub> ( $\mu$ A)	Package
X9317	3-Wire (Up/Down)	1, 10, 50, 100	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 1	200	1	8 Ld MSOP, 8 Ld PDIP, 8 Ld SOIC, 8 Ld TSSOP
X9318	3-Wire (Up/Down)	10	4.5 to 5.5		0 to +5	Linear	$\pm$ 1	200	300	8 Ld PDIP, 8 Ld SOIC
X9319	3-Wire (Up/Down)	10, 50	4.5 to 5.5		0 to +10	Linear	$\pm$ 1	40	300	8 Ld PDIP, 8 Ld SOIC
X9C102	3-Wire (Up/Down)	1	4.5 to 5.5		-V <sub>CC</sub> to +V <sub>CC</sub>	Linear	$\pm$ 1	40	750	8 Ld PDIP, 8 Ld SOIC
X9C103	3-Wire (Up/Down)	10	4.5 to 5.5		-V <sub>CC</sub> to +V <sub>CC</sub>	Linear	$\pm$ 1	40	750	8 Ld PDIP, 8 Ld SOIC
X9C104	3-Wire (Up/Down)	100	4.5 to 5.5		-V <sub>CC</sub> to +V <sub>CC</sub>	Linear	$\pm$ 1	40	750	8 Ld PDIP, 8 Ld SOIC
X9C303	3-Wire (Up/Down)	32	4.5 to 5.5		-V <sub>CC</sub> to +V <sub>CC</sub>	Logarithmic	$\pm$ 1	40	750	8 Ld PDIP, 8 Ld SOIC, 8 Ld TSSOP
X9C503	3-Wire (Up/Down)	50	4.5 to 5.5		-V <sub>CC</sub> to +V <sub>CC</sub>	Linear	$\pm$ 1	40	750	8 Ld PDIP, 8 Ld SOIC

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DCPs/DCCs

**Single - 128 Tap**

Device	Bus Interface Type	Resistance Options (k $\Omega$ )	V <sub>CC</sub> Range (V)	V+, V-Supply Range (V)	Terminal Voltage Range V <sub>L</sub> to V <sub>H</sub> (V)	Resistance Taper	Wiper Current (mA)	Wiper Resistance ( $\Omega$ )	Standby Current I <sub>SB</sub> ( $\mu$ A)	Package
ISL22316	I <sup>2</sup> C	10, 50	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 3	70	5	10 Ld MSOP
ISL22416	SPI	10, 50	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 3	70	5	10 Ld MSOP
ISL95310	3-Wire (Up/Down)	10, 50	2.7 to 5.5	8 to 13.2	0 to V+	Linear	$\pm$ 3	70	2	10 Ld MSOP
ISL95311	I <sup>2</sup> C	10, 50	2.7 to 5.5	8 to 13.2	0 to V+	Linear	$\pm$ 3	70	2	10 Ld MSOP
ISL95710	3-Wire (Up/Down)	10, 50	2.7 to 5.5	-5.5 to -2.7	V- to V <sub>CC</sub>	Linear	$\pm$ 1	200	0.5 (typ)	10 Ld MSOP
ISL95711	I <sup>2</sup> C	10, 50	2.7 to 5.5	-5.5 to -2.7	V- to V <sub>CC</sub>	Linear	$\pm$ 1	200	0.5 (typ)	10 Ld MSOP
ISL96017	I <sup>2</sup> C	10, 50	3.0 to 3.6		0 to V <sub>CC</sub>	Linear	$\pm$ 3	300	10	8 Ld DFN
ISL22319	I <sup>2</sup> C	10, 50	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 3	70	850	8 Ld MSOP
ISL22419	SPI	10, 50	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 3	70	850	8 Ld MSOP

**Single - 256 Tap**

Device	Bus Interface Type	Resistance Options (k $\Omega$ )	V <sub>CC</sub> Range (V)	V+, V-Supply Range (V)	Terminal Voltage Range V <sub>L</sub> to V <sub>H</sub> (V)	Resistance Taper	Wiper Current (mA)	Wiper Resistance ( $\Omega$ )	Standby Current I <sub>SB</sub> ( $\mu$ A)	Package
X9279	2-Wire	50, 100	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 3	150	5	14 Ld TSSOP, 18 Ld PDIP
ISL95810	I <sup>2</sup> C	10, 50	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	1	200	5	8 Ld DFN, 8 Ld MSOP
X9271	SPI	50, 100	2.7 to 5.5		0 to +5.0	Linear	$\pm$ 3	150	5	14 Ld TSSOP

**Single - 1024 Tap**

Device	Bus Interface Type	Resistance Options (k $\Omega$ )	V <sub>CC</sub> Range (V)	V+, V-Supply Range (V)	Terminal Voltage Range V <sub>L</sub> to V <sub>H</sub> (V)	Resistance Taper	Wiper Current (mA)	Wiper Resistance ( $\Omega$ )	Standby Current I <sub>SB</sub> ( $\mu$ A)	Package
X9118	2-Wire	100	2.7 to 5.5	2.7 to 5.5 and -5.5 to -2.7	V- to V+	Linear	$\pm$ 3	100	3	14 Ld TSSOP
X9119	2-Wire	100	2.7 to 5.5		V- to V+	Linear	$\pm$ 3	100	3	14 Ld TSSOP
X9110	SPI	100	2.7 to 5.5	2.7 to 5.5 and -5.5 to -2.7	0 to V <sub>CC</sub>	Linear	$\pm$ 3	150	3	14 Ld TSSOP
X9111	SPI	100	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 3	150	3	14 Ld TSSOP

**Dual - 32 Tap**

Device	Bus Interface Type	Resistance Options (k $\Omega$ )	V <sub>CC</sub> Range (V)	V+, V-Supply Range (V)	Terminal Voltage Range V <sub>L</sub> to V <sub>H</sub> (V)	Resistance Taper	Wiper Current (mA)	Wiper Resistance ( $\Omega$ )	Standby Current I <sub>SB</sub> ( $\mu$ A)	Package
X93254	3-Wire (Up/Down)	50	2.7 to 3.3		0 to V <sub>CC</sub>	Linear	0.6	1k	1	14 Ld TSSOP
X93255	3-Wire (Up/Down)	50	4.5 to 5.5		0 to V <sub>CC</sub>	Linear	0.6	1k	4	14 Ld TSSOP
X93256	3-Wire (Up/Down)	12.5, 50	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	0.6	1k	1	14 Ld TSSOP

**Dual - 64 Tap**

Device	Bus Interface Type	Resistance Options (k $\Omega$ )	V <sub>CC</sub> Range (V)	V+, V-Supply Range (V)	Terminal Voltage Range V <sub>L</sub> to V <sub>H</sub> (V)	Resistance Taper	Wiper Current (mA)	Wiper Resistance ( $\Omega$ )	Standby Current I <sub>SB</sub> ( $\mu$ A)	Package
X9221A	2-Wire	2, 10, 50	4.5 to 5.5		-3.0 to V <sub>CC</sub>	Linear	$\pm$ 1	130	500	20 Ld PDIP, 20 Ld SOIC
X9418	2-Wire	2.5, 10	2.7 to 5.5	-5.5 to -2.7	V- to V <sub>CC</sub>	Linear	$\pm$ 3	150	1	24 Ld PDIP, 24 Ld SOIC, 24 Ld TSSOP
X9410	SPI	10	2.7 to 5.5	-5.5 to -2.7	V- to V <sub>CC</sub>	Linear	$\pm$ 3	150	1	24 Ld PDIP, 24 Ld SOIC, 24 Ld TSSOP

Dual - 128 Tap

Device	Bus Interface Type	Resistance Options (k $\Omega$ )	V <sub>CC</sub> Range (V)	V+, V-Supply Range (V)	Terminal Voltage Range V <sub>L</sub> to V <sub>H</sub> (V)	Resistance Taper	Wiper Current (mA)	Wiper Resistance ( $\Omega$ )	Standby Current I <sub>SB</sub> ( $\mu$ A)	Package
ISL22326	I <sup>2</sup> C	10, 50	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 3	70	5	14 Ld TSSOP
ISL22329	I <sup>2</sup> C	10, 50	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 3	70	850	10 Ld MSOP
ISL22426	SPI	10, 50	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 3	70	5	14 Ld TSSOP
ISL22429	SPI	10, 50	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 3	70	850	10 Ld MSOP

Dual - 256 Tap

Device	Bus Interface Type	Resistance Options (k $\Omega$ )	V <sub>CC</sub> Range (V)	V+, V-Supply Range (V)	Terminal Voltage Range V <sub>L</sub> to V <sub>H</sub> (V)	Resistance Taper	Wiper Current (mA)	Wiper Resistance ( $\Omega$ )	Standby Current I <sub>SB</sub> ( $\mu$ A)	Package
X9268	2-Wire	50, 100	2.7 to 5.5	2.7 to 5.5 and -5.5 to -2.7	V- to V+	Linear	$\pm$ 3	150k	5	24 Ld SOIC, 24 Ld TSSOP
X95820	I <sup>2</sup> C	10, 50	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	1	200	5	14 Ld TSSOP
X9455	2-Wire, 3-Wire (Up-Down)	2, 10, 50, 100	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 3	150	20	24 Ld PDIP, 24 Ld SOIC, 24 Ld TSSOP
X9260	SPI	50, 100	2.7 to 5.5	2.7 to 5.5 and -5.5 to -2.7	V- to V+	Linear	$\pm$ 3	150k	5	24 Ld SOIC, 24 Ld TSSOP
X9261	SPI	50, 100	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 3	150k	5	24 Ld SOIC, 24 Ld TSSOP

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Quad - 64 Tap

Device	Bus Interface Type	Resistance Options (k $\Omega$ )	V <sub>CC</sub> Range (V)	V+, V-Supply Range (V)	Terminal Voltage Range V <sub>L</sub> to V <sub>H</sub> (V)	Resistance Taper	Wiper Current (mA)	Wiper Resistance ( $\Omega$ )	Standby Current I <sub>SB</sub> ( $\mu$ A)	Package
X9241A	2-Wire	2, 10, 50	4.5 to 5.5		-3.0 to V <sub>CC</sub>	Linear	$\pm$ 1	130	500	20 Ld PDIP, 20 Ld SOIC, 20 Ld TSSOP
X9408	2-Wire	2.5, 10	2.7 to 5.5	2.7 to 5.5 and -5.5 to -2.7	V- to V+	Linear	$\pm$ 3	150	1	24 Ld PDIP, 24 Ld SOIC, 24 Ld TSSOP
X9409	2-Wire	2.5, 10	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 3	150	1	24 Ld SOIC, 24 Ld TSSOP
X9400	SPI	2.5, 10	2.7 to 5.5	2.7 to 5.5 and -5.5 to -2.7	V- to V+	Linear	$\pm$ 3	150	1	24 Ld PDIP, 24 Ld SOIC, 24 Ld TSSOP
X9401	SPI	2.5, 10	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 3	150	1	24 Ld PDIP, 24 Ld SOIC, 24 Ld TSSOP

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DCPs/DCCs

**Quad - 128 Tap**

Device	Bus Interface Type	Resistance Options (k $\Omega$ )	V <sub>CC</sub> Range (V)	V+, V-Supply Range (V)	Terminal Voltage Range V <sub>L</sub> to V <sub>H</sub> (V)	Resistance Taper	Wiper Current (mA)	Wiper Resistance ( $\Omega$ )	Standby Current I <sub>SB</sub> ( $\mu$ A)	Package
ISL22346	I <sup>2</sup> C	10, 50	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 3	70	5	20 Ld TSSOP
ISL22349	I <sup>2</sup> C	10, 50	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 3	70	2400	14 Ld TSSOP
ISL22446	SPI	10, 50	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 3	70	5	20 Ld TSSOP
ISL22449	SPI	10, 50	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 3	70	2400	14 Ld TSSOP

**Quad - 256 Tap**

Device	Bus Interface Type	Resistance Options (k $\Omega$ )	V <sub>CC</sub> Range (V)	V+, V-Supply Range (V)	Terminal Voltage Range V <sub>L</sub> to V <sub>H</sub> (V)	Resistance Taper	Wiper Current (mA)	Wiper Resistance ( $\Omega$ )	Standby Current I <sub>SB</sub> ( $\mu$ A)	Package
X9252	2-Wire, 3-Wire (Up/Down)	2, 10, 50, 100	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 3	150	100	24 Ld TSSOP
X9258	2-Wire	50, 100	2.7 to 5.5	2.7 to 5.5 and -5.5 to -2.7	V <sub>-</sub> to V <sub>+</sub>	Linear	$\pm$ 1	100	5	24 Ld SOIC, 24 Ld TSSOP
X9259	2-Wire	50, 100	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 1	100	5	24 Ld SOIC, 24 Ld TSSOP
X95840	I <sup>2</sup> C	10, 50	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 1	200	5	20 Ld TSSOP
X9250	SPI	50, 100	2.7 to 5.5	2.7 to 5.5 and -5.5 to -2.7	V <sub>-</sub> to V <sub>+</sub>	Linear	$\pm$ 3	150	5	24 Ld SOIC, 24 Ld TSSOP
X9251	SPI	50, 100	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 3	150	3	24 Ld PDIP, 24 Ld SOIC, 24 Ld TSSOP

**Volatile**

**Single - 32 Tap**

Device	Bus Interface Type	Resistance Options (k $\Omega$ )	V <sub>CC</sub> Range (V)	V+, V-Supply Range (V)	Terminal Voltage Range V <sub>L</sub> to V <sub>H</sub> (V)	Resistance Taper	Wiper Current (mA)	Wiper Resistance ( $\Omega$ )	Standby Current I <sub>SB</sub> ( $\mu$ A)	Package
ISL90460	2-Pin (Up/Down)	10, 50, 100	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 0.6	600	1	5 Ld SC-70, 5 Ld SOT-23
ISL90461	2-Pin (Up/Down)	10, 50, 100	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 0.6	600	1	6 Ld SC-70, 6 Ld SOT-23
ISL90462	2-Pin (Up/Down)	10, 50, 100	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 0.6	600	1	6 Ld SC-70, 6 Ld SOT-23
X9015	3-Wire (Up/Down)	10, 50	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 1	200	1	8 Ld MSOP, 8 Ld PDIP, 8 Ld SOIC

**Single - 128 Tap**

Device	Bus Interface Type	Resistance Options (k $\Omega$ )	V <sub>CC</sub> Range (V)	V+, V-Supply Range (V)	Terminal Voltage Range V <sub>L</sub> to V <sub>H</sub> (V)	Resistance Taper	Wiper Current (mA)	Wiper Resistance ( $\Omega$ )	Standby Current I <sub>SB</sub> ( $\mu$ A)	Package
ISL23710	3-Wire (Up/Down)	10, 50	2.7 to 5.5	-5.5 to -2.7	V- to V <sub>CC</sub>	Linear	1	70	0.5	10 Ld MSOP
ISL23711	I <sup>2</sup> C	10, 50	2.7 to 5.5	-5.5 to -2.7	V- to V <sub>CC</sub>	Linear	1	70	0.5	10 Ld MSOP
ISL90726	I <sup>2</sup> C	10, 50	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	1	85	0.5	6 Ld SC-70
ISL90727	I <sup>2</sup> C	10, 50	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	1	85	0.5	6 Ld SC-70

**Single - 256 Tap**

Device	Bus Interface Type	Resistance Options (k $\Omega$ )	V <sub>CC</sub> Range (V)	V+, V-Supply Range (V)	Terminal Voltage Range V <sub>L</sub> to V <sub>H</sub> (V)	Resistance Taper	Wiper Current (mA)	Wiper Resistance ( $\Omega$ )	Standby Current I <sub>SB</sub> ( $\mu$ A)	Package
ISL90810	I <sup>2</sup> C	10, 50	2.7 to 5.5		0V to V <sub>CC</sub>	Linear	1	200	5	8 Ld MSOP

**Dual - 32 Tap**

Device	Bus Interface Type	Resistance Options (k $\Omega$ )	V <sub>CC</sub> Range (V)	V+, V-Supply Range (V)	Terminal Voltage Range V <sub>L</sub> to V <sub>H</sub> (V)	Resistance Taper	Wiper Current (mA)	Wiper Resistance ( $\Omega$ )	Standby Current I <sub>SB</sub> ( $\mu$ A)	Package
X9460	2-Wire	32	2.7 to 5.5	2.7 to 5.5 and -5.5 to -2.7	V- to V+	Logarithmic	$\pm$ 3	200	3	14 Ld TSSOP

**Quad - 256 Tap**

Device	Bus Interface Type	Resistance Options (k $\Omega$ )	V <sub>CC</sub> Range (V)	V+, V-Supply Range (V)	Terminal Voltage Range V <sub>L</sub> to V <sub>H</sub> (V)	Resistance Taper	Wiper Current (mA)	Wiper Resistance ( $\Omega$ )	Standby Current I <sub>SB</sub> ( $\mu$ A)	Package
ISL90840	I <sup>2</sup> C	10, 50	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 3	200	5	20 Ld TSSOP
ISL90841	I <sup>2</sup> C	10, 50	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 3	200	5	14 Ld TSSOP
ISL90842	I <sup>2</sup> C	10, 50	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 3	200	5	14 Ld TSSOP
ISL90843	I <sup>2</sup> C	10, 50	2.7 to 5.5		0 to V <sub>CC</sub>	Linear	$\pm$ 3	200	2800	10 Ld DFN, 10 Ld MSOP

**Digitally Controlled Capacitors (DCCs)**

Device	Number of Taps	Capacitance Range (pF)	Step Size (pF)	Bus Interface Type	Package
X90100	32	7.5 to 14.5	0.22	3-Wire (Up-Down)	8 Ld MSOP

Note: The Eval Boards are available upon request. Contact our local representatives for additional information.

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DCPs/DCCs