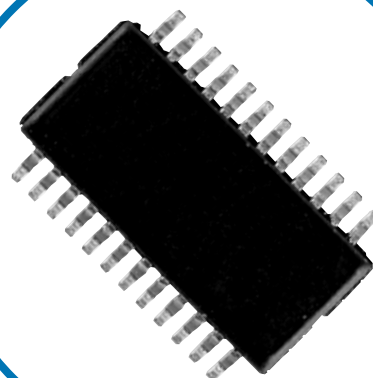


# TaNCap™ IEEE 1284 Integrated Filter Network

QRC1284x2™ Series

- **Single chip parallel port solution**
- **Small 28-pin QSOP package**
- **Built-in ESD protection into 17 lines**
- **Highly integrated - Replaces 43 discretes**
- **Proven TaNCap™ Thin film technology**



## Electrical Data

		Resistors	Capacitors
Tolerance	%	±10	±20
TCR	ppm/°C	±100	N/A
Operating temperature range	°C	-40 to +85	-40 to +85
Maximum power dissipation	watts	0.1 per resistor	N/A
Operating voltage	volts	±6 volts	

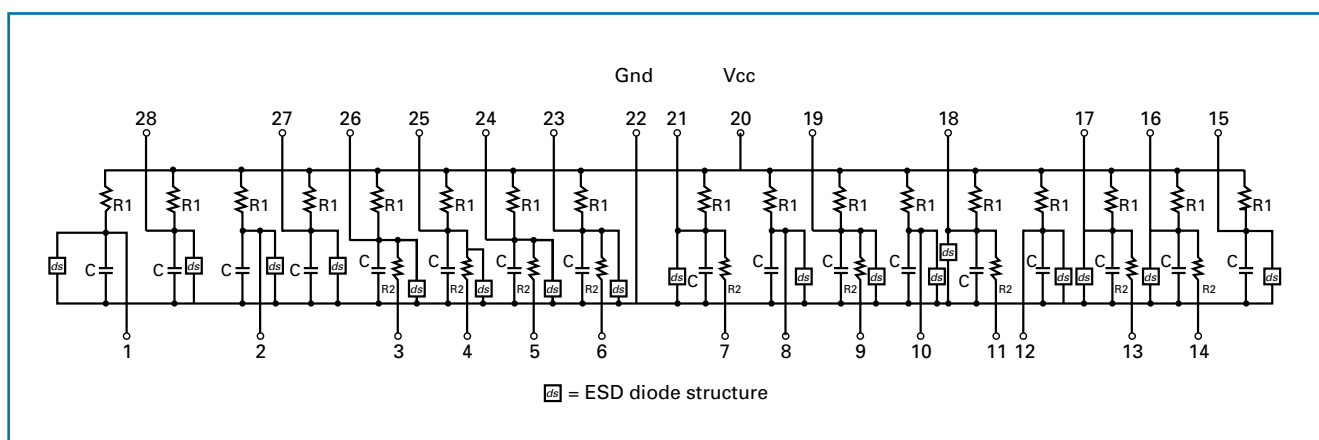
The TaNCap™ QRC1284x2 is a single package solution designed for the IEEE1284 enhanced parallel port interface and other digital interface applications. This highly integrated TaNCap™ thin film technology network offers four different functions in a single 28-pin QSOP package.

R1 is a pull-up resistor for, R2 is a series termination resistor and C is a low pass filter capacitor. ESD protection is provided for each termination line.

The 28-pin in QSOP package offers a high level of integration in a single surface mount device. 43 discrete passive components are replaced by one IEEE 1284x2 filter network.

The TaNCap series of resistor-capacitor networks are manufactured using military and space proven tantalum nitride thin film technology. For high reliability combined with superior performance.

## Schematic



### General Note

Welwyn Components reserves the right to make changes in product specification without notice or liability. All information is subject to Welwyn's own data and is considered accurate at time of going to print.

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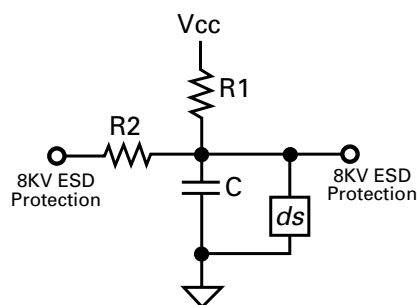
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## QRC1284x2 Pin-Out Chart

Signal (compatible model)	Source	Termination Resistor R2	Filter Capacitor	Pull-up Resistor R1	1284x2 Pin	ESD* Protection	1284x2 Pin	ESD* Protection	Circuit Diagram
Data 1	Bi-directional	X	X	X	25	8KV	4	8KV	1
Data 2	Bi-directional	X	X	X	24	8KV	5	8KV	1
Data 3	Bi-directional	X	X	X	23	8KV	6	8KV	1
Data 4	Bi-directional	X	X	X	21	8KV	7	8KV	1
Data 5	Bi-directional	X	X	X	19	8KV	9	8KV	1
Data 6	Bi-directional	X	X	X	18	8KV	11	8KV	1
Data 7	Bi-directional	X	X	X	17	8KV	13	8KV	1
Data 8	Bi-directional	X	X	X	16	8KV	14	8KV	1
nAck	Peripheral		X	X	15	8KV			2
Busy	Peripheral		X	X	12	8KV			2
PError	Peripheral		X	X	10	8KV			2
Select	Peripheral		X	X	8	8KV			2
nFault	Peripheral		X	X	27	8KV			2
nInit	Host		X	X	1	8KV			2
nSelectIn	Host		X	X	2	8KV			2
nStrobe	Host	X	X	X	26	8KV	3	8KV	1
nAutoFd	Host		X	X	28	8KV			2

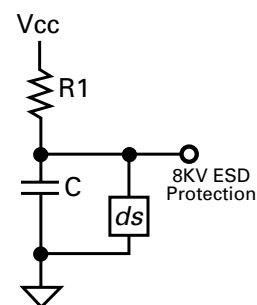
\* Human body model per MIL-STD-883 Method 3015.

**Circuit diagram 1**



For specific pin numbers,  
refer to Pin-out table above

**Circuit diagram 2**



For specific pin numbers,  
refer to Pin-out table above

ds = ESD diode structure