



URCZ1284-XX

Preliminary

LINEAR INTEGRATED CIRCUIT

PARALLEL PORT SINGLE TERMINATION NETWORK WITH $\pm 15\text{KV}$ ESD PROTECTION

■ DESCRIPTION

The UTC **URCZ1284-XX** is a high-speed parallel port single termination. Here is two basic cells in the integrated termination, Cell 1 and Cell 2 (See Fig1 & Fig 2). The UTC **URCZ1284-XX** contains the proper termination for 8 data lines, 1 strobe line, 4 control lines and 4 status lines; The UTC **URCZ1284-XX** has an extra protection against ESD.

The UTC **URCZ1284-XX** is ideally suitable for Notebooks, PC Peripherals, Servers and Desktops, etc.

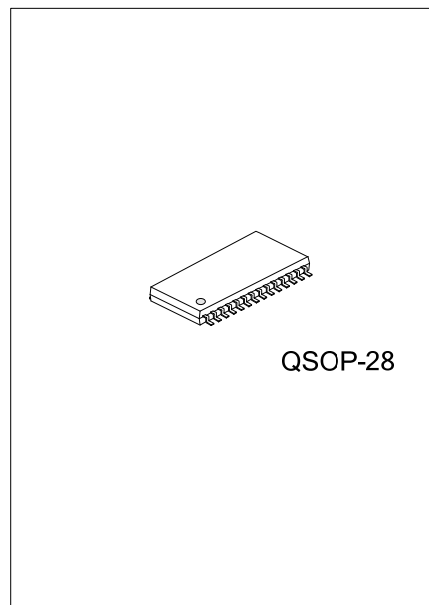
■ FEATURES

- * Highly integrated termination
- * EMI noise filtering
- * RFI noise filtering
- * Withstand $\pm 8\text{ kV}$ contact-discharge

■ ORDERING INFORMATION

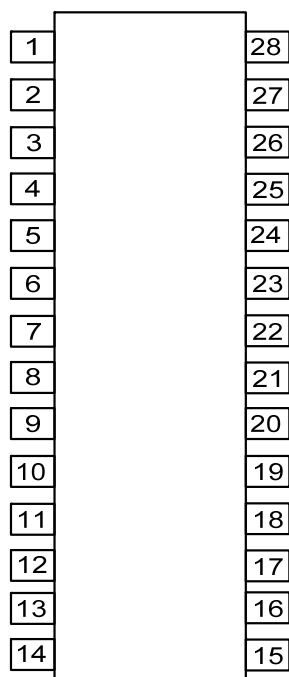
Ordering Number		Package	Packing
Lead Free	Halogen Free		
URCZ1284L-XX-SQ8-T	URCZ1284G-XX-SQ8-T	QSOP-28	Tube
URCZ1284L-XX-SQ8-R	URCZ1284G-XX-SQ8-R	QSOP-28	Tape & Reel

URCZ1284G-XX-SQ8-T	(1) Packing Type (2) Package Type (3) Resistance Code (4) Halogen Free	(1) T: Tube, R: Tape Reel (2) SQ8: QSOP-28 (3) Code: 01, 02, 03 (4) G: Halogen Free, L: Lead Free
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QSOP-28

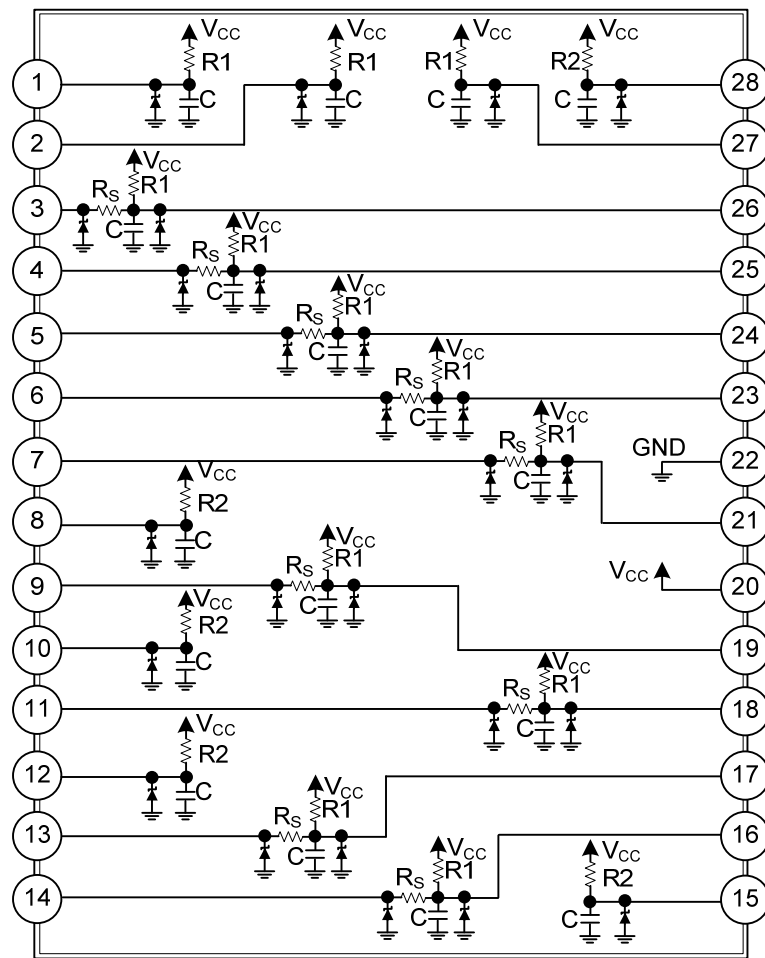
■ PIN CONFIGURATION



■ PIN DESCRIPTION

PIN NO.	PIN NAME	DESCRIPTION
1	Select in	Terminal of Select input
2	Error	Terminal of Error
3	Strobe	Input of Strobe(before EMI filtering)
4	Bit 1	Input of Bit 1 (before EMI filtering)
5	Bit 2	Input of Bit 2 (before EMI filtering)
6	Bit 3	Input of Bit 3 (before EMI filtering)
7	Bit 4	Input of Bit 4 (before EMI filtering)
8	Acknowledge	Terminal of Acknowledge
9	Bit 5	Input of Bit 5 (before EMI filtering)
10	Paper out	Terminal of Paper out
11	Bit 6	Input of Bit 6 (before EMI filtering)
12	Busy	Terminal of Busy
13	Bit 7	Input of Bit 7 (before EMI filtering)
14	Bit 8	Input of Bit 8 (before EMI filtering)
15	Select paper	Terminal of Select paper
16	Bit 8'	Output of Bit 8 (after EMI filtering)
17	Bit 7'	Output of Bit 7 (after EMI filtering)
18	Bit 6'	Output of Bit 6 (after EMI filtering)
19	Bit 5'	Output of Bit 5 after EMI filtering)
20	Vcc	Supply Voltage
21	Bit 4'	Output of Bit 4 (after EMI filtering)
22	Gnd	Ground
23	Bit 3'	Output of Bit 3 (after EMI filtering)
24	Bit 2'	Output of Bit 2 (after EMI filtering)
25	Bit 1'	Output of Bit 1 (after EMI filtering)
26	Strobe'	Output of Strobe (after EMI filtering)
27	Autofeed	Terminal of Autofeed
28	Reset	Terminal of Reset

■ BLOCK DIAGRAM



NO	R1	R2	Rs	C
Code 01	4.7K Ω	4.7K Ω	33 Ω	180pF
Code 02	2.2K Ω	2.2K Ω	33 Ω	220pF
Code 03	1K Ω	5.1K Ω	39 Ω	150pF
Tolerance	$\pm 10\%$	$\pm 10\%$	$\pm 10\%$	$\pm 20\%$

■ ABSOLUTE MAXIMUM RATING ($T_A=25^{\circ}\text{C}$, unless otherwise specified.)

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage	V_{CC}	5.5	V
Power Rating Per Resistor	P_R	100	mW
Package POWER Rating	P_P	1	W
Maximum Operating Junction Temperature	T_J	125	$^{\circ}\text{C}$
Operating Temperature Range	T_{OPR}	0~+70	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55~+150	$^{\circ}\text{C}$
ESD Discharge IEC61000-4-2, Contact Discharge	V_{PP}	± 8	KV

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$, unless otherwise specified.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Leakage Current	I_R	$V_{CC}=5.0\text{V}$			10	mA
Breakdown Voltage	V_{BR}	$I_R=1\text{mA}$	6			V
Forward Voltage Drop	V_F	$I_F=50\text{mA}$		0.9		V

■ BASIC CELL CONFIGURATIONS

The UTC **URCZ1284-XX** is built around the two basic cells described by Fig 1 & Fig 2.

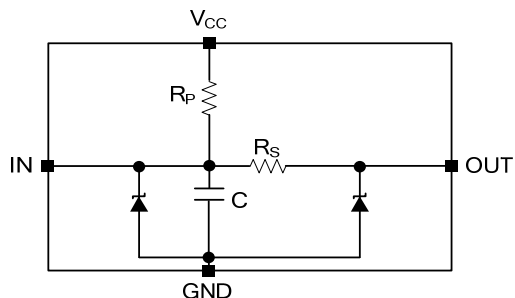


Fig 1. Cell 1 for line termination, EMI filtering and ESD protection for the Datalines and Strobe signals. There are 9 of these cells inside the UTC URCZ1284-XX

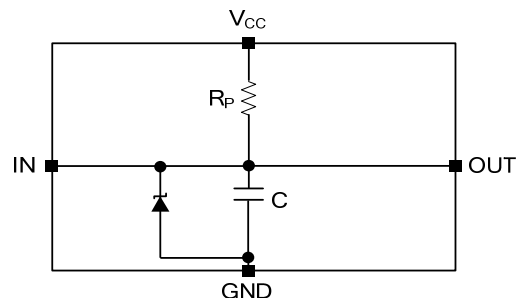
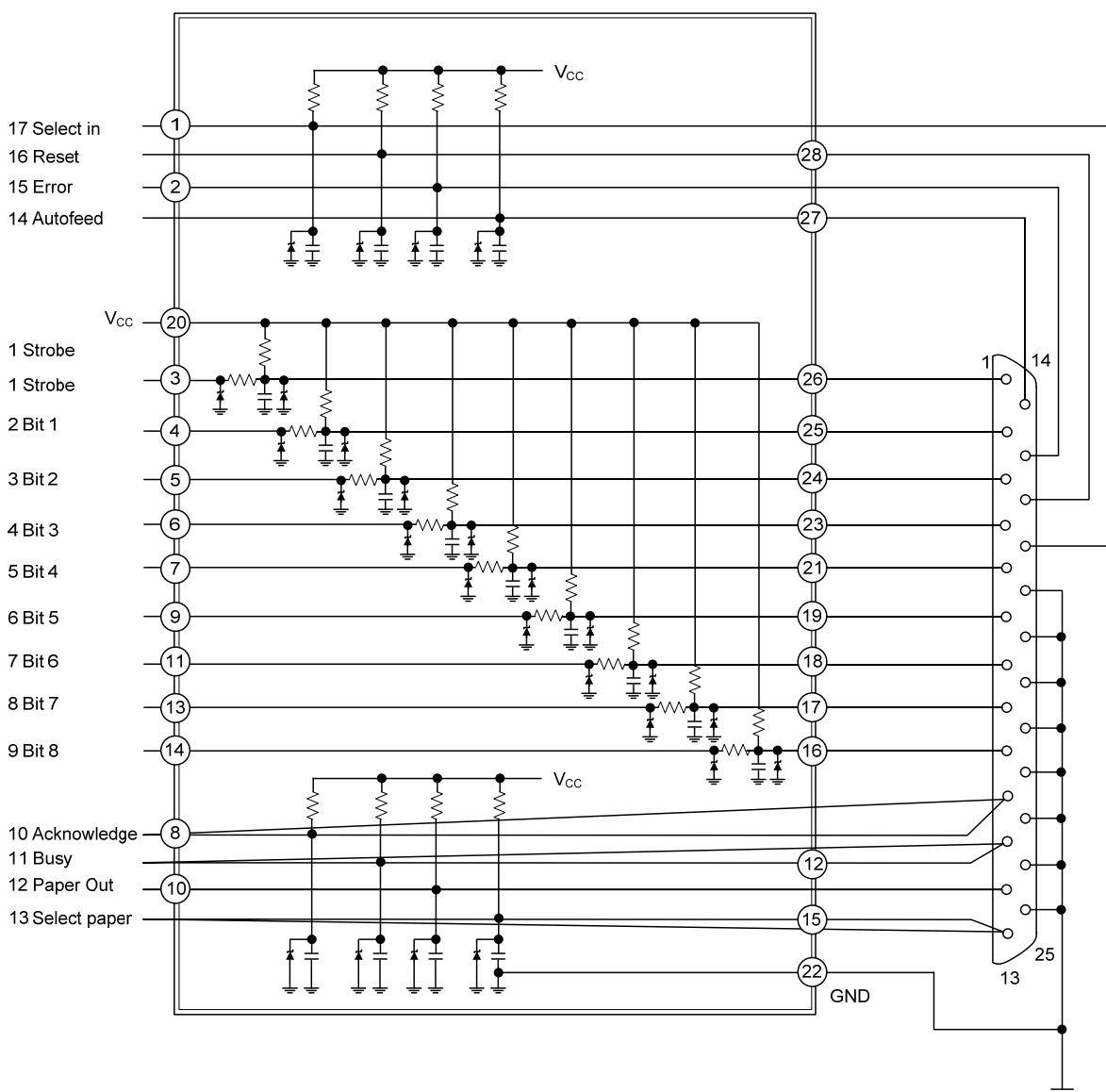


Fig 2. Cell 2 for EMI filtering and ESD protection of the Control and Status signals. There are 8 of these cells inside the UTC URCZ1284-XX

■ TYPICAL APPLICATION CIRCUIT



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