UNISONIC TECHNOLOGIES CO., LTD

URCZ1284-XX

LINEAR INTEGRATED CIRCUIT

PARALLEL PORT SINGLE TERMINATION NETWORK WITH ±15KV 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 statut lines; The UTC **URCZ1284-XX** has an extra protection against ESD.

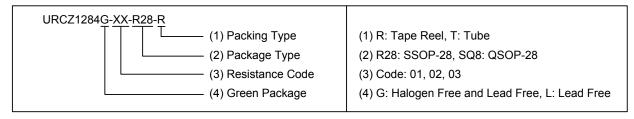
The UTC **URCZ1284-XX** is ideally suitable for Notebooks, PC Peripherals, Servers and Desktops, etc.

■ FEATURES

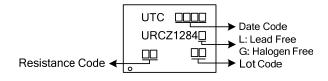
- * Highly integrated termination
- * EMI noise filtering
- * RFI noise filtering
- * Withstand ±8 kV contact-discharge

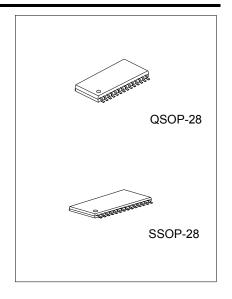
ORDERING INFORMATION

Ordering Number		Doolsono	Dooking	
Lead Free	Halogen Free	Package	Packing	
URCZ1284L-XX- R28-R	URCZ1284G-XX-R28-R	SSOP-28	Tape Reel	
URCZ1284L-XX-SQ8-T	URCZ1284G-XX-SQ8-T	QSOP-28	Tube	
URCZ1284L-XX- SQ8-R	URCZ1284G-XX-SQ8-R	QSOP-28	Tape & Reel	



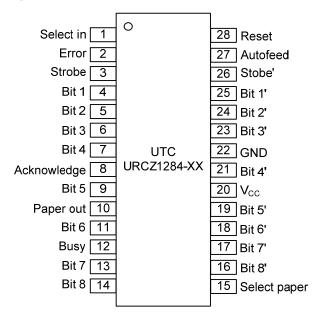
MARKING





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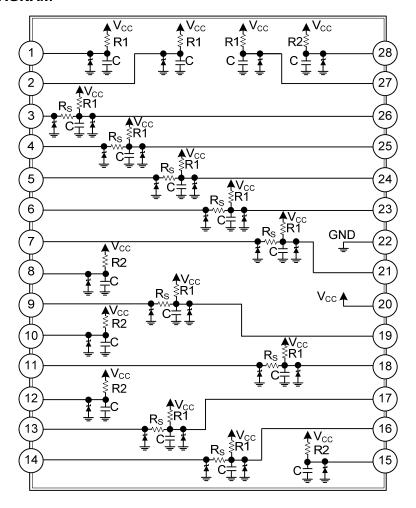
■ PIN CONFIGURATION



■ 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	Stobe'	Output of Strobe (after EMI filtering)	
27	Autofeed	Terminal of Autofeed	
28	Reset	Terminal of Reset	

■ BLOCK DIAGRAM



NO	R1	R2	Rs	С
Code 01	4.7ΚΩ	4.7ΚΩ	33Ω	180pF
Code 02	2.2ΚΩ	2.2ΚΩ	33Ω	220pF
Code 03	1ΚΩ	5.1ΚΩ	39Ω	150pF

■ **ABSOLUTE MAXIMUM RATING** (T_A=25°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	°C
ESD Discharge IEC61000-4-2, Contact Discharge	V_{PP}	±8	KV
Operating Temperature Range	T_OPR	0 ~ +70	°C
Storage Temperature Range	T _{STG}	-55 ~ +150	°C

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°C, unless otherwise specified.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Leakage Current	I _R	V _{CC} =5.0V			10	μΑ
Breakdown Voltage	V_{BR}	I _R =1mA	6			V
Forward Voltage Drop	V _F	I _F =50mA		0.9		V

■ BASIC CELL CONFIGURATIONS

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

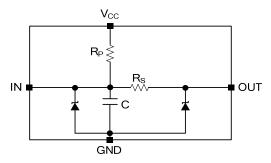


Fig 1. Cell 1 for line termination, EMI filtering and ESD protection for the Datalines and Strobe signals. There are 9 of these cells inside the UTC URCZ1284-XX

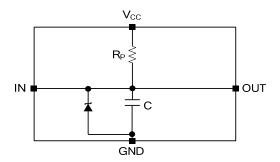
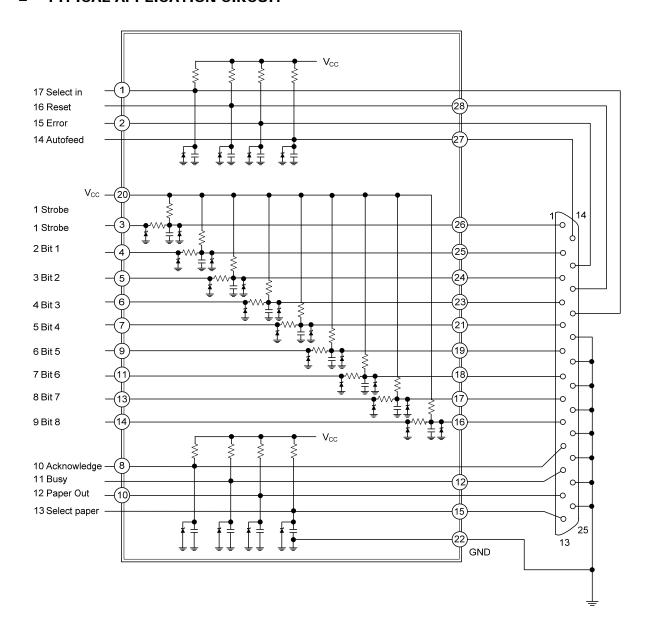


Fig 2. Cell 2 for EMI filtering and ESD protection of the Control and Status signals. There are 8 of these cells inside the UTC URCZ1284-XX

■ TYPICAL APPLICATION CIRCUIT



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