

## Multiple RS-232 Drivers and Receivers

### Features

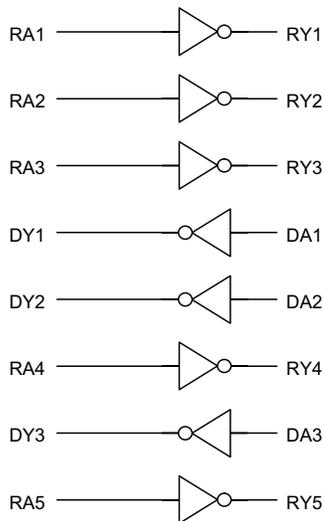
- Single-chip with easy interface between UART and serial port connector
- Three drivers and five receivers meet or exceed the requirements of EIA/TIA-232-D
- Designed to support data rates up to 120 Kbit/s
- Driver current-limited output: 25mA typ.
- Flexible supply voltage range
- ESD protection exceeds 5kV
- 20-pin SOP package

### General Description

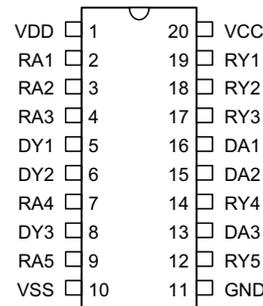
The HT6571 is a CMOS device containing three RS-232 line drivers, and five RS-232 line receivers that are used

to interface data terminal equipment (DTE) with data circuit-terminating equipment (DCE).

### Block Diagram



### Pin Assignment



**HT6571**  
**- 20 SOP-A**

### Absolute Maximum Ratings

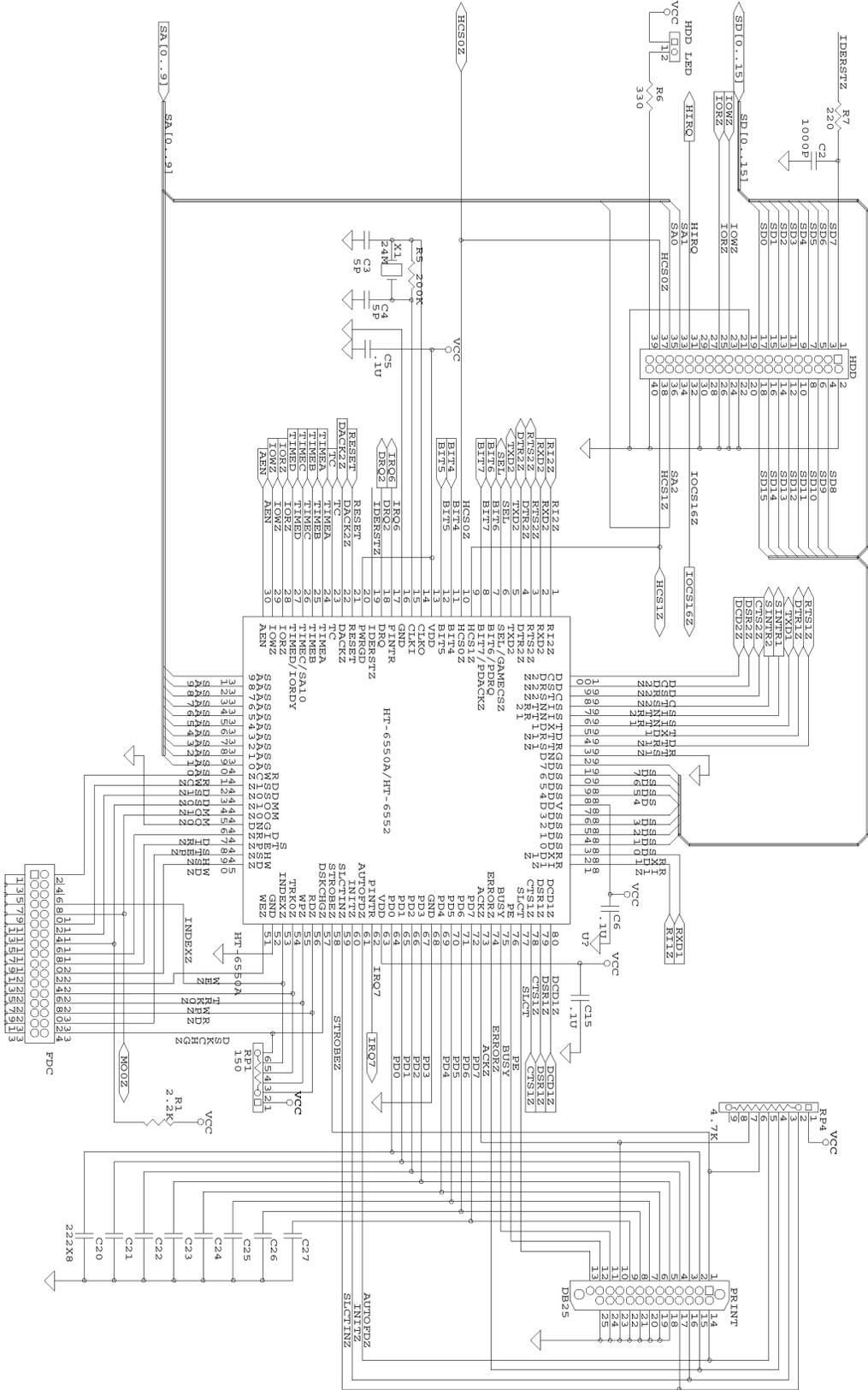
Supply Voltage (VSS VDD).....	-15V~15V	Supply Voltage (GND VCC).....	-0.3V~5.5V
Input Voltage Driver .....	0V~7V	Receiver .....	-15V~15V
Output Voltage Driver .....	-15V~15V	Receiver .....	0V~7V

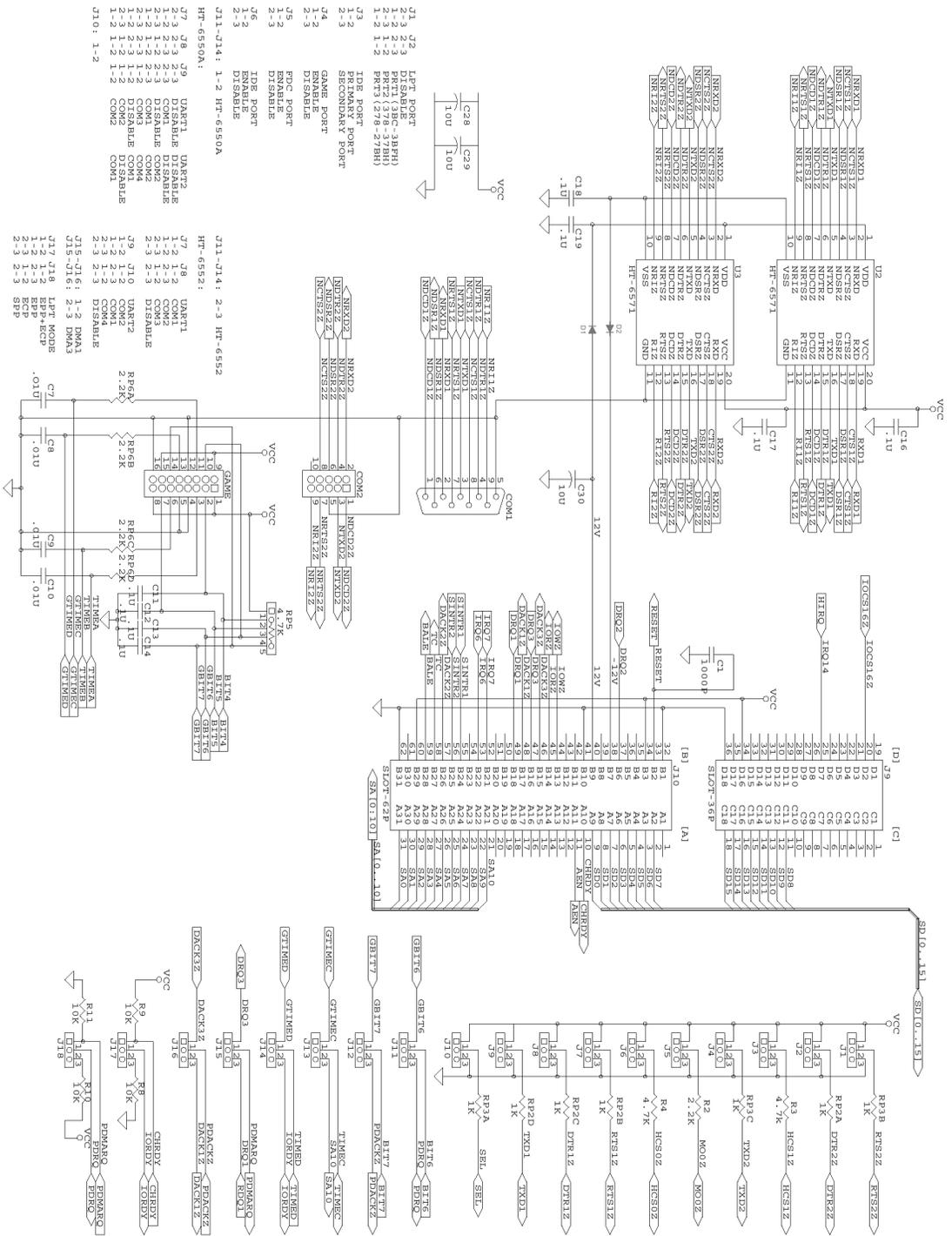
Note: These are stress ratings only. Stresses exceeding the range specified under "Absolute Maximum Ratings" may cause substantial damage to the device. Functional operation of this device at other conditions beyond those listed in the specification is not implied and prolonged exposure to extreme conditions may affect device reliability.

**Electrical Characteristics**

Symbol	Parameter	Test Conditions			Min.	Typ.	Max.	Unit
		V <sub>DD</sub>	V <sub>CC</sub>	Conditions				
V <sub>DD</sub>	Operation Voltage	—	—	—	7.5	9	15	V
V <sub>SS</sub>	Operation Voltage	—	—	—	-7.5	-9	-15	V
V <sub>CC</sub>	Operation Voltage	—	—	—	4.5	5	5.5	V
V <sub>IH1</sub>	Driver Input High	12V	5V	—	2	—	—	V
V <sub>IL1</sub>	Driver Input Low	12V	5V	—	—	—	0.8	V
V <sub>IH2</sub>	Receiver Input High	12V	5V	—	3	—	—	V
V <sub>IL2</sub>	Receiver Input Low	12V	5V	—	—	—	0	V
I <sub>OH1</sub>	Receiver Output Source Current	12V	5V	V <sub>O</sub> =2.4V	-1	-2	-3	mA
I <sub>OL1</sub>	Receiver Output Sink Current	12V	5V	V <sub>O</sub> =0.4V	+1	+2	+3	mA
I <sub>OS(H)</sub>	High-level Driver Short Current	12V	5V	V <sub>O</sub> =0V	-15	-25	-35	mA
I <sub>OS(L)</sub>	Low-level Driver Short Current	12V	5V	V <sub>O</sub> =0V	15	25	35	mA
S <sub>R1</sub>	Slew Rate	12V	5V	R <sub>L</sub> =7kΩ, C <sub>1</sub> =330pF	—	—	30	V/μs

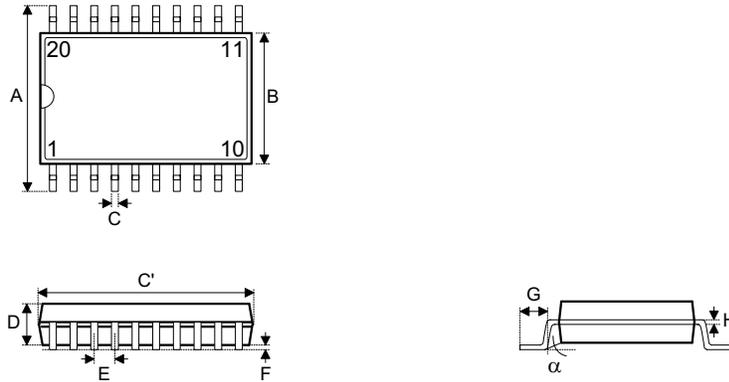
Application Circuits





**Package Information**

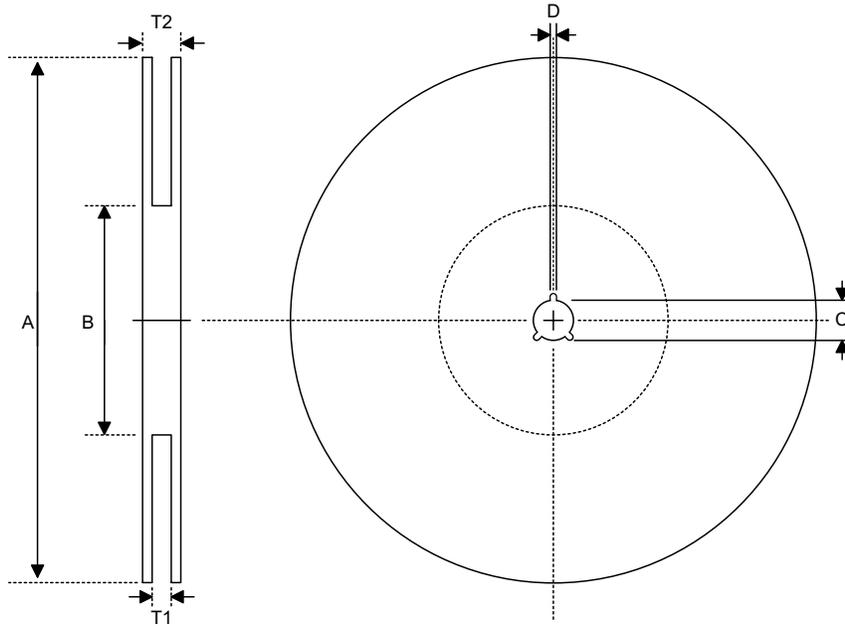
20-pin SOP (300mil) outline dimensions



Symbol	Dimensions in mil		
	Min.	Nom.	Max.
A	394	—	419
B	290	—	300
C	14	—	20
C'	490	—	510
D	92	—	104
E	—	50	—
F	4	—	—
G	32	—	38
H	4	—	12
$\alpha$	0°	—	10°

**Product Tape and Reel Specifications**

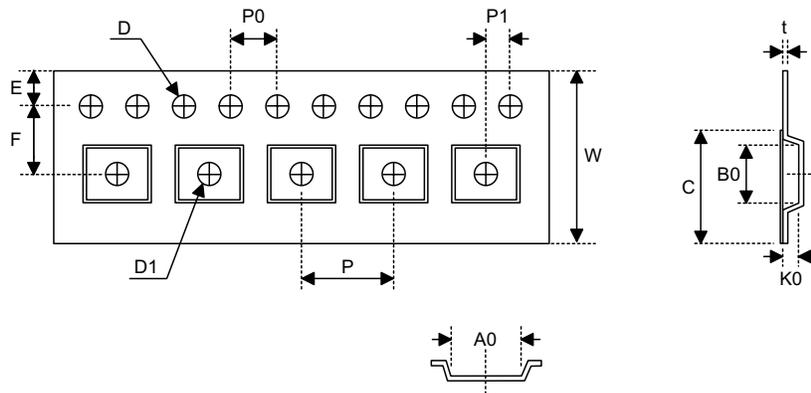
Reel dimensions



SOP 20W

Symbol	Description	Dimensions in mm
A	Reel Outer Diameter	330±1.0
B	Reel Inner Diameter	62±1.5
C	Spindle Hole Diameter	12.75+0.15
D	Key Slit Width	2.0+0.15
T1	Space Between Flange	24.4±0.2
T2	Reel Thickness	28.4+0.4

**Carrier tape dimensions**



**SOP 20W**

Symbol	Description	Dimensions in mm
W	Carrier Tape Width	24.0+0.3 -0.1
P	Cavity Pitch	12.0±0.1
E	Perforation Position	1.75±0.1
F	Cavity to Perforation (Width Direction)	11.5±0.1
D	Perforation Diameter	1.5+0.1
D1	Cavity Hole Diameter	1.5+0.25
P0	Perforation Pitch	4.0±0.1
P1	Cavity to Perforation (Length Direction)	2.0±0.1
A0	Cavity Length	10.8±0.1
B0	Cavity Width	13.3±0.1
K0	Cavity Depth	3.2±0.1
t	Carrier Tape Thickness	0.3±0.05
C	Cover Tape Width	21.3

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