

# uTrust 2100 R QFN16 Smart Card Reader Microcontroller



Identiv's uTrust 2100 R is the small but mighty, backbone of contact smart card readers.

Identiv's uTrust 2100 R ROM based Smart Card Reader Microcontroller is the ideal chip for contact smart card reader integration and designs. Interface with a variety of smart card form factors. Fully Compliant with ISO/IEC 7816, EMV, and PC/SC Standards. Full Support of both T=0 and T=1 protocols. Supports Class A, Class B, Class C. Low power consumption. Fully compliant ESD protection as per JESD22-A114D (March 2006) and JESD22-A115A "Machine Model" from AN1181 on card pins. 4kV on smart card pins and 1.5kV on remaining pins. Varied LED behavior to indicate card presence, card access, and errors.

#### Secure

• The OTP (One time programmable) ROM chip isn't open to in field fw changes

#### Smart

 Supports Remote Wake-up capability for card insertion/removal

#### Compact

• Small size QFN-16 package

#### Fast

• Fast 80C51 processor

## Specifications

PARAMETER	
Storage Temperature	-55°C to 150°C
Operating Temperature	0°C to 70°C (Ambient temperature in air)
5.0 V supply voltage	4.9V to 5.5V
Power consumption during operation (without smart card)	< 6mA
Power consumption during suspend/standby	< 500µA
General	Self-clocking internal oscillator, no external oscillator required
	5.0 V supply input with built in voltage regulator
	Internal voltage supervisor for 4.8V
	Low power consumption
USB	12 Mbps USB Operation Compliant to the USB 2.0 Specification
	Integrated USB 1.5K pull-up resistor
	USB TID number: TID 40001362
	Number of pipes used – 4(control, Bulk-in, Bulk-out and Interrupt)
	CCID compliant firmware
Smart Card	Automatic Character repetition for T=0 protocol parity error recovery
	Automatic card deactivation on card removal
	Internal Procedure Byte Filtering for T=0 protocol
	Short circuit protection on smart card section
	Maximum smart card clock of 8Mhz
	Maximum baud rate is 600Kbps @FI/DI-97
	RoHS3 and REACH compliant
Part Number	112994R2R

### **I ENTIV**

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