Table 1. DEVICE ORDERING INFORMATION

Device

Table 3. MAXIMUM RATINGS

Symbol	Parameter	Conditions	Min	Typ	Max	Units
V_{CCX}	CC and VCONNx pins (Note 1)		−0.5		28	V
T_J	Maximum Junction Temperature				+150	°C
$T_{STORAGE}$	Storage Temperature Range		−65		+150	°C
T_L	Lead Temperature (Soldering 10 Seconds) (Note 2)				+260	°C
ESD	Human Body Model, JEDEDC JESD22−A114	Connector Pins (CC, VCONNx)	4.5			kV
		Others	2			

FUSB380C

Product Block Diagram
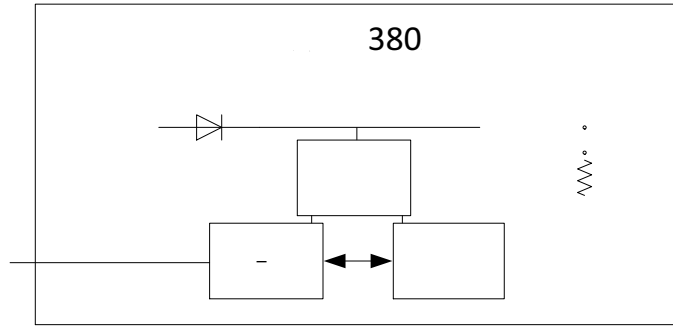
Figure 2. Block Diagram

FUSB380C

Functional Behaviour

VCONN Terminations

The FUSB380C device presents a R_A termination whenever the VCONNx pins are unpowered. Only the VCONNx pin that has a voltage in the valid range for $t_{VCONNStable}$ will be weakened to R_{A_WEAK}.

The function of R_{A_WEAK} is to discharge the voltage on VCONN to $V_{VCONNDischarge}$ within a maximum time of $t_{VCONNDischarge}$ and a maximum load of 10 μF. The R_{A_WEAK} termination will be applied until VCONN voltage drops below the $V_{RAReconnect}$ threshold. Once this threshold is crossed R_A is reapplied.

Field Programmable Function

The FUSB380C can be programmed by the customer via Vendor Defined Messages. The user can re–program the device a maximum of 5 times.

The device's Discover Identity response can be fully customized for Passive cables, with or without Modal support.

The FUSB380C also offers the ability to program a Serial Number that can be read via a VDM Specific command.

Table 5. SUMMARY OF FIELD PROGRAMMABLE BITS

Parameter	Description	# of Bits
ID HEADER		
MEM_USB_HOST		**1**
MEM_USB_DEV		
MEM_PROD_TYPE	Product Type	
MEM_MODAL	Modal Operation	

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Table 5. SUMMARY OF FIELD PROGRAMMABLE BITS

Parameter	Description	# of Bits
SERIAL NUMBERS		
MEM_CABLE_SN	Cable Serial Number	136
MEM_SN_SVID	Serial numbers replied in SVIDx 0 = SVID0 1 – SVID1	1
MEM_SN_COMMAND	Customer Serial Number SVID specific command	5
MEM_DIESN_COMMAND	Die Serial Number SVID specific command	5

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