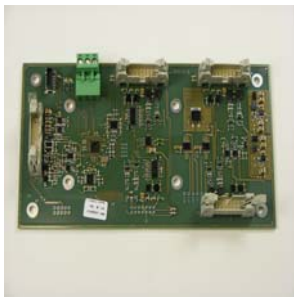


SKiiP3 Parallel Board 3-fold



Parallel Board for SKiiP3

SKiiP3 Parallel Board 3-fold

Features

- Driving 3 SKiiP in parallel for higher load current
- The controller drives 3 SKiiP3 subsystems through one interface
- Short pulse suppression and extension
- Generation of dominant dead time for all paralleled SKiiP3
- F-Option board can be easily mounted
- Detection and handling of error signals from paralleled SKiiP3
- Handling of analogue signals from paralleled SKiiP3
- Monitoring of internal generated supply voltages
- Can be mounted using M4 metal screws
- Coated with varnish
- Climate class acc. to IEC60721-3-3: 3K3
- Protection level acc. to IEC 60529: IP00

Typical Applications*

- Paralleling of 3 GB type SKiiP3
- Using one controller for driving all paralleled SKiiP3

Footnotes

¹⁾ Supply voltage for connected SKiiP subsystems

²⁾ Operation temperature is real ambient temperature around the board. Please note: by longterm operation near upper limit of temperature the life time decreases.

³⁾ Current consumption of parallel board without SKiiP subsystems

Absolute Maximum Ratings			
Symbol	Conditions	Values	Unit
V_s	Power Supply ¹⁾	19.2 ... 28.8	V
V_{iH}	Input signal voltage	15 + 0.3	V
T_{op}	Operating temperature ²⁾	-40 ... 85	°C
T_{stg}	Storage temperature	-40 ... 85	°C

Characteristics					
Symbol	Conditions	min.	typ.	max.	Unit
V_s	supply voltage non stabilized	19.2	24	28.8	V
I_{SO}	Supply current (no load) ³⁾		72		mA
I_s	Supply current primary side		$= 72 + 3 \cdot I_s(\text{SKiiP})$		mA
V_{IT+}	Input threshold voltage (HIGH)	12.3			V
V_{IT-}	Input threshold voltage (LOW)			4.6	V
R_{IN}	Input resistance		10		kΩ
C_{IN}	Input capacitance		1		nF
$t_{d(on)IO}$	Input-output turn-on signal propagation time		1		μs
$t_{d(off)IO}$	Input-output turn-off signal propagation time		1		μs
t_{SIS}	short pulse suppression time		0.625		μs
$t_{d(err)}$	Error input-output propagation time		9		μs
t_{pRESET}	Error memory reset time		0.009		ms
t_{TD}	Top-Bot interlock dead time		4		μs
w	Weight		105		g
MTBF	Mean Time Between Failure @ Ta = 40°C, max. load		0.83		10 ⁶ h
HxWxD	Dimensions		180x93 x27		mm

This is an electrostatic discharge sensitive device (ESDS), international standard IEC 60747-1, Chapter IX

* The specifications of our components may not be considered as an assurance of component characteristics. Components have to be tested for the respective application. Adjustments may be necessary. The use of SEMIKRON products in life support appliances and systems is subject to prior specification and written approval by SEMIKRON. We therefore strongly recommend prior consultation of our staff.