

SGI-3D

- V1.00 of November 2005 -

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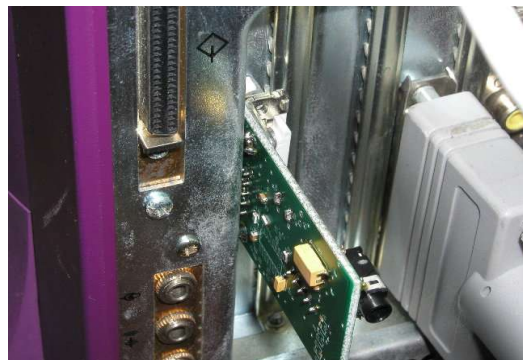
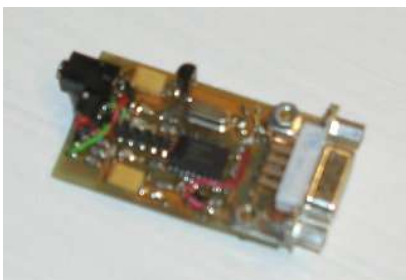
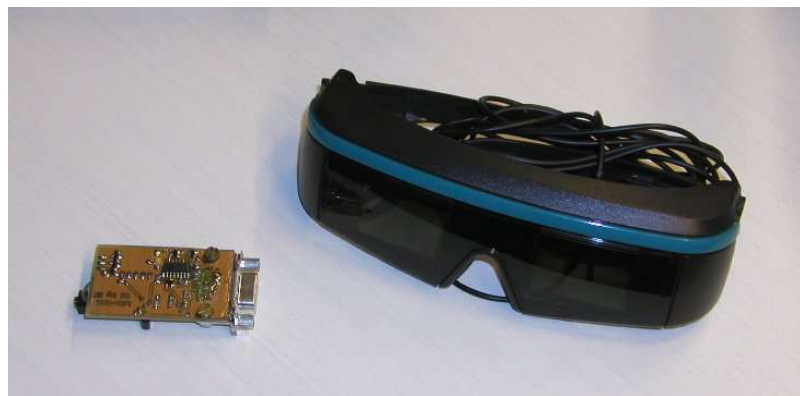
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- Homebuilt Crystal-Eyes for SGI-Workstations -

SGI Crystal Eyes:

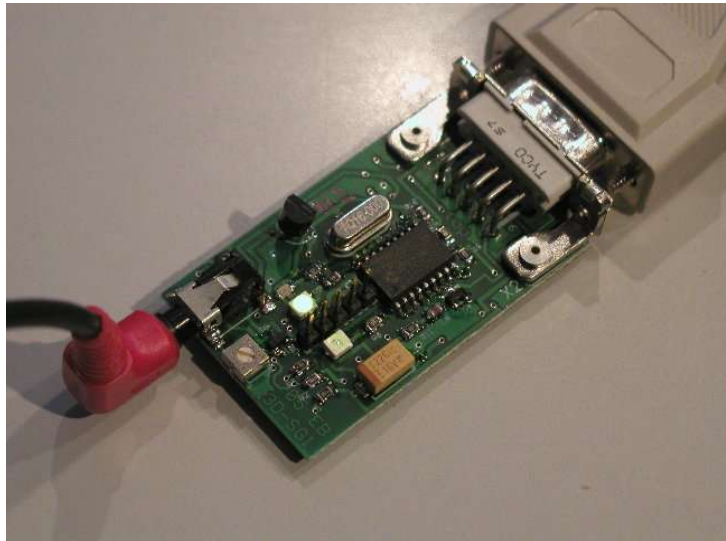


Everyone knows the original SGI Crystal-Eyes which come together with a wireless IR transmitter. These work very fine but are rather rare and expensive. An alternative is to use a homebuilt interface to connect readily available and cheap LCD shutter glasses from PC style graphics adaptors to your SGI workstation (shown is prototype and PC-shutter glasses "fanatic"):

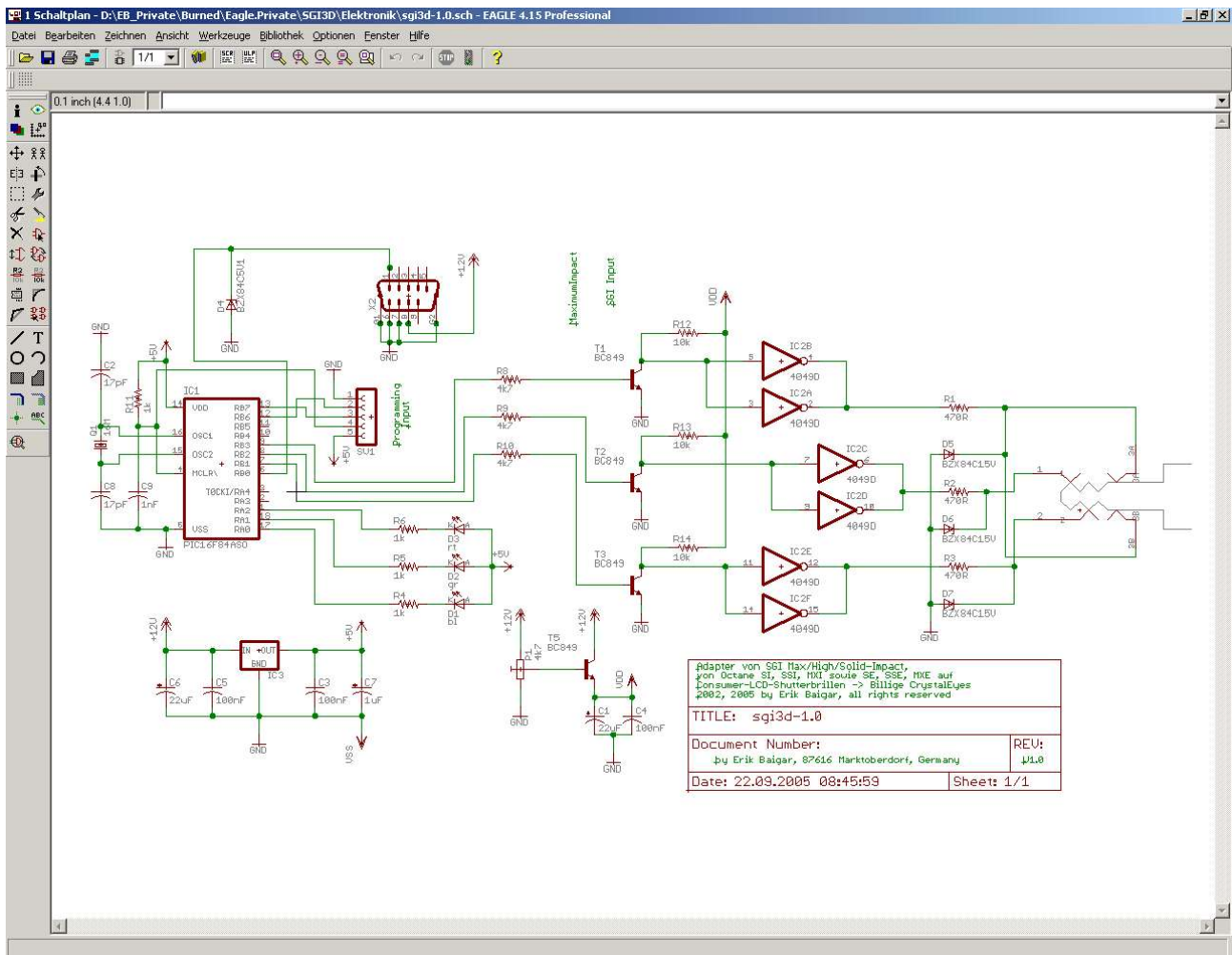


Final, PIC-based converter

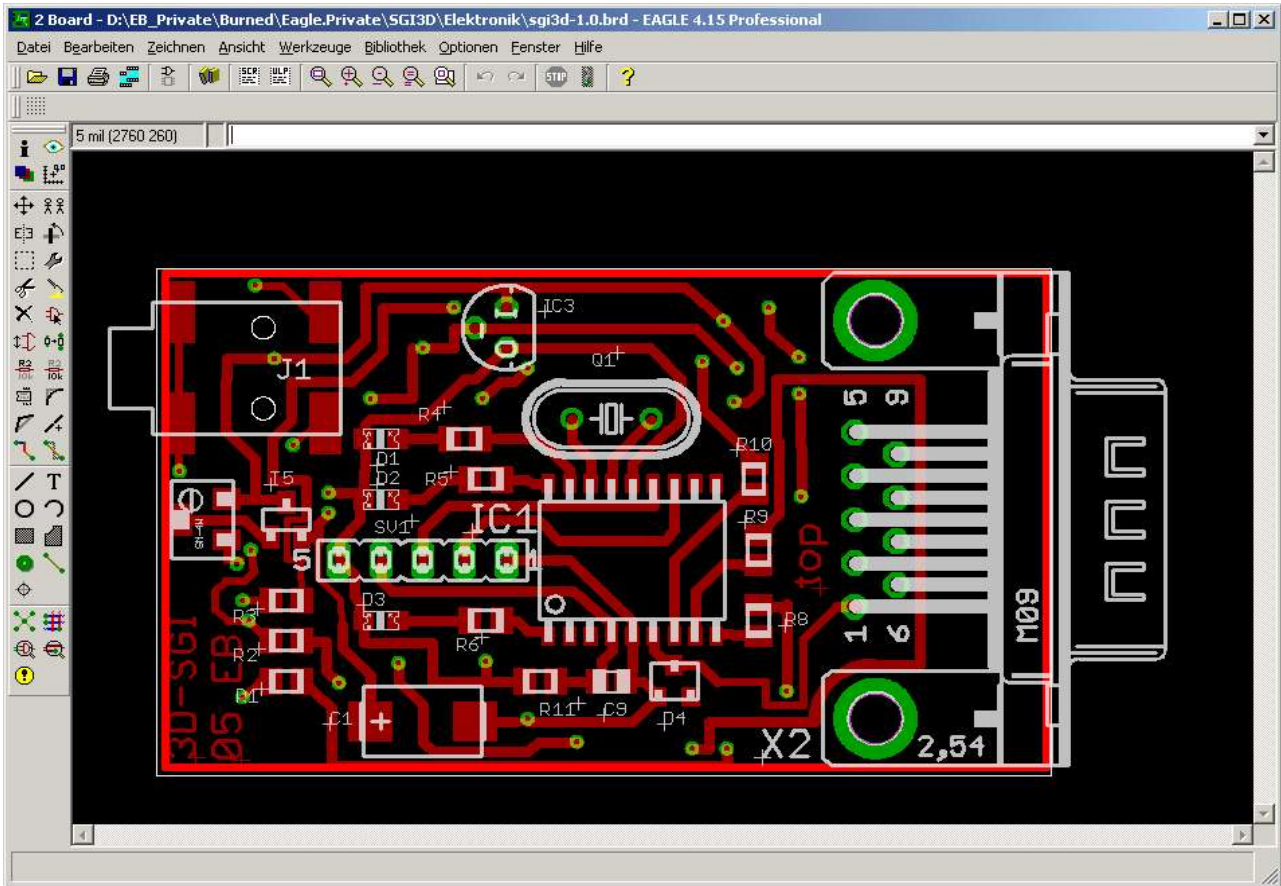
The converter plugs into the 3D-port of SGI's Solid-Impact, High-Impact and Maximum-Impact graphics of the Indigo series workstations and has been tested with Octane's MXI and SE, too. It should work with die older Extreme, too if a special cable is iused. The current firmware (1.0) is optimized for die PC-style shutter glasses "Cyber Boy" which can be obtained for <\$10 on eBay.



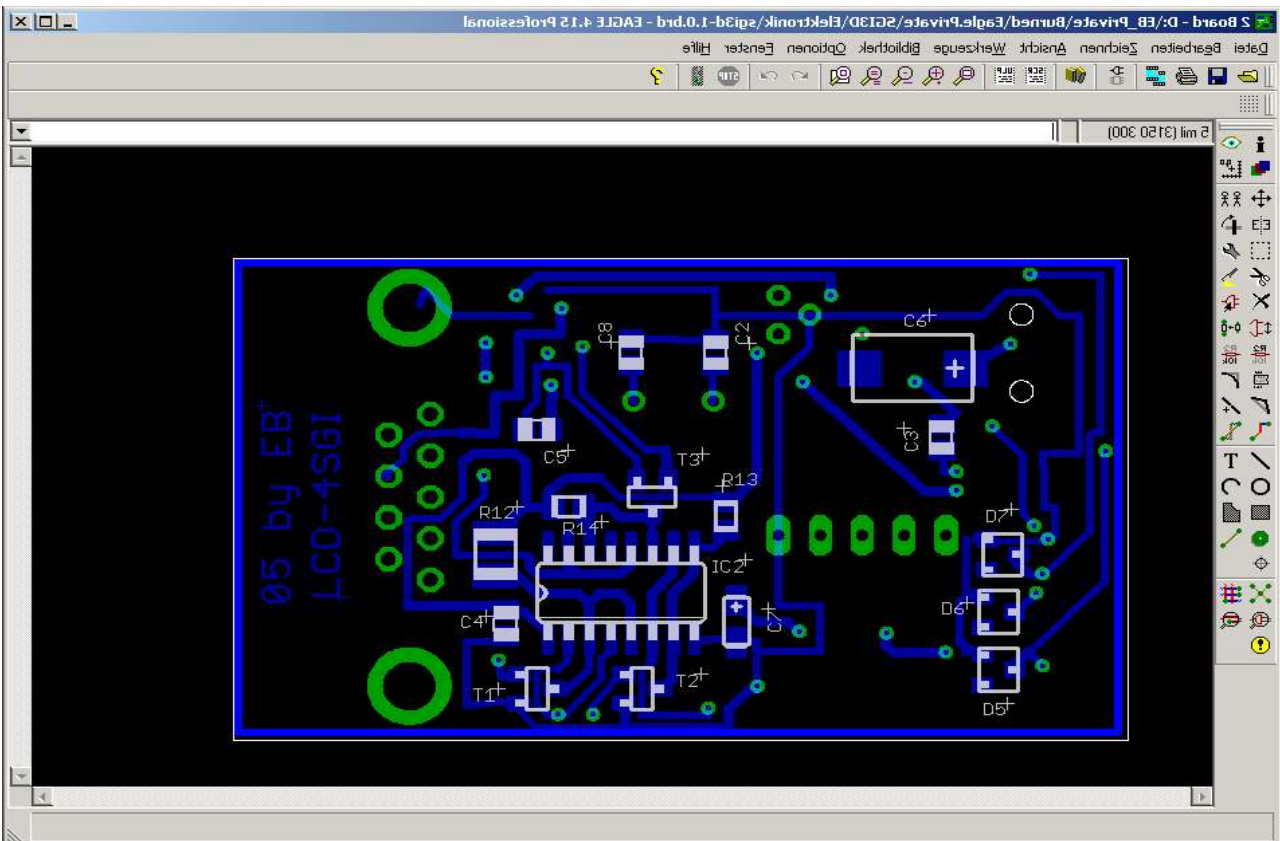
Schematic:



Top-Placeplan:



Bottom-Placeplan:



Part List:

Part	Value	Package	Library	Bürklin/Farnell-No
C1	22uF	CT7343	rel	78D154
C2	17pF	C0805 rcl	rel	53D221
C3	100nF	C0805 rcl	rel	53D2372
C4	100nF	C0805 rcl	rel	53D2372
C5	100nF	C0805 rcl	rel	53D2372
C6	22uF	CT7343	rel	78D154
C7	1uF	CT3216	rel	25D1040
C8	17pF	C0805 rcl	rel	53D221
C9	1nF	C0805 rcl	rel	53D228
D1	bl	LED-0805	erik	Farnell 142-530
D2	gr	LED-0805	erik	Farnell 142-529
D3	rt	LED-0805	erik	Farnell 142-505
D4	BZX84C5V1	TO236	diode	22S8550
D5	BZX84C15V	TO236	diode	22S9100
D6	BZX84C15V	TO236	diode	22S9100
D7	BZX84C15V	TO236	diode	22S9100
IC1	PIC16F84ASO	SO-18W	microchip	64S1938
IC2	4049D	SO16 40xx	cmos	61S2510
IC3	78LXX	v-reg	linear	50S1200
J1	KLINKESMD	SMD_LST	erik	39F1158
P1	4k7	SMD_SM	erik	76E3816
Q1	16M	HC49U-V	crystal	78D154
R1	470R	M0805	rel	11E178
R2	470R	M0805	rel	11E178
R3	470R	M0805	rel	11E178
R4	1k	M0805	rel	11E194
R5	1k	M0805	rel	11E194
R6	1k	M0805	rel	11E194
R8	4k7	M0805	rel	11E226
R9	4k7	M0805	rel	11E226
R10	4k7	M0805	rel	11E226
R11	1k	M0805	rel	11E194
R12	10k	R1210	rel	11E544
R13	10k	M0805	rel	11E242
R14	10k	M0805	rel	11E242
SV1	FE05-1	PINEHEAD	con-lsta	59F2106
T1	BC849	SOT23	transistor-npn	12S6275
T2	BC849	SOT23	transistor-npn	12S6275
T3	BC849	SOT23	transistor-npn	12S6275
T5	BC849	SOT23	transistor-npn	12S6275
X2	M09HP	Sub-D9-M	con-subd	52F2520

Completed SGI-3D-Adapter:

