

## Compare

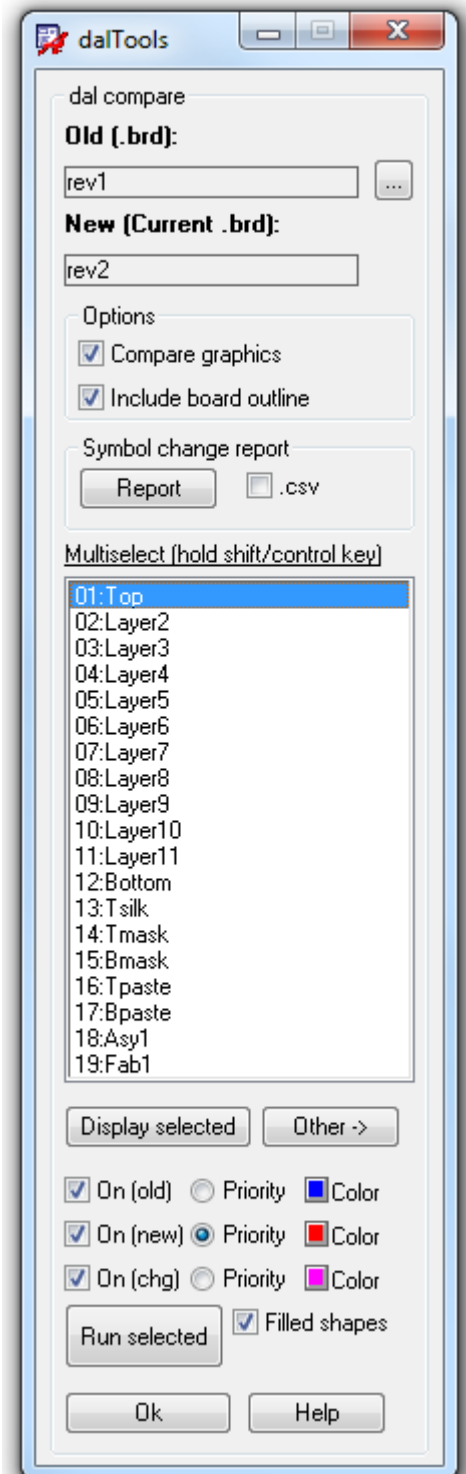
Compares and displays ALL graphic and symbol changes between two boards. This application quickly and easily displays differences between the two board revisions based on artwork film layers. In addition, all refdes, xy, rotation, part number, etc. changes are displayed in a report file.

This is very useful to determine exactly what changed between board revisions or to track PCB design progress.

One example would be to quickly see if anything changed on the paste mask layers in order to determine if a new stencil order is required. Another is testpoint changes for ICT fixtures.

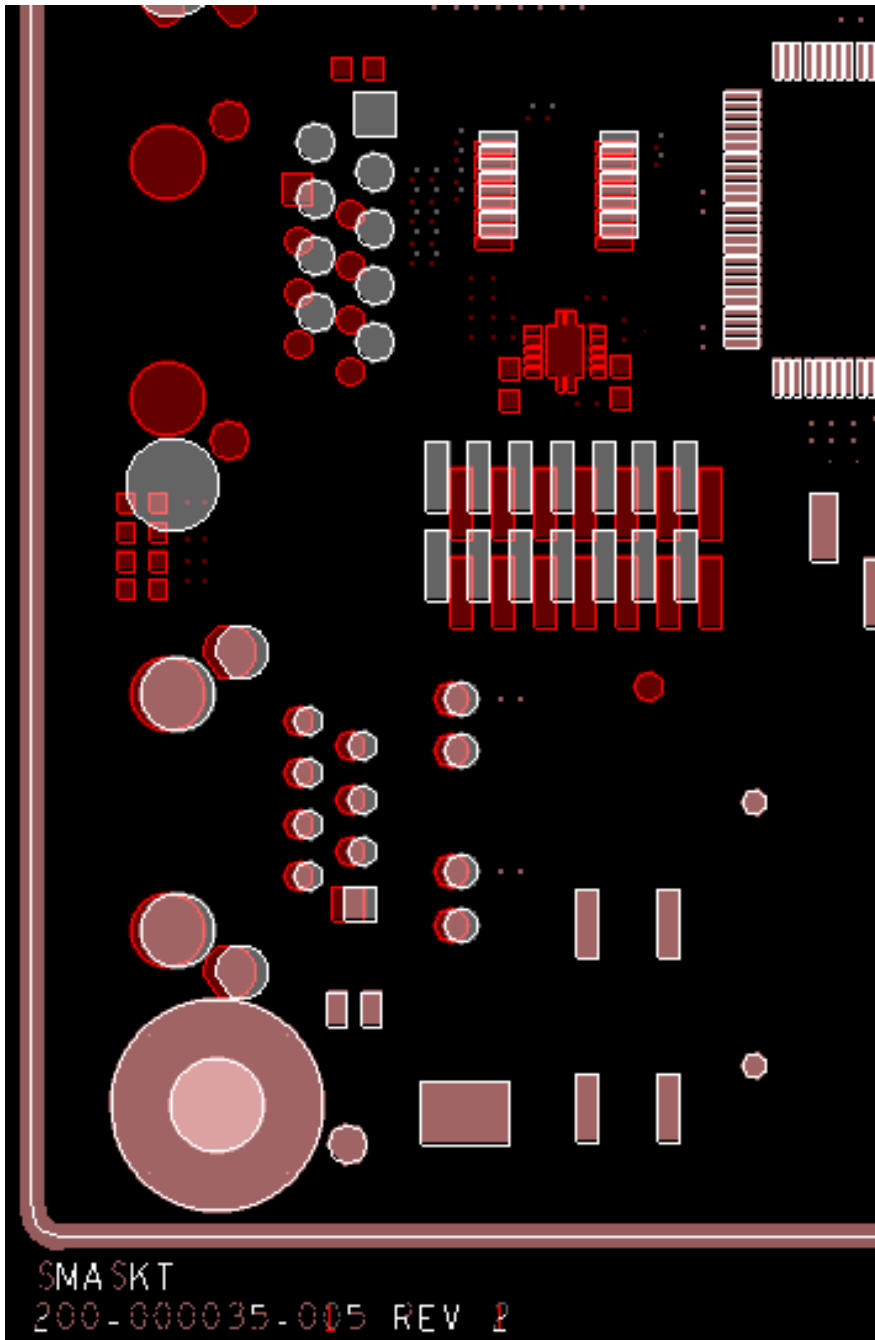
Features:

- Visually displays all symbol and graphic changes between two boards. Changes are very distinguishable and noticeable just by panning around the screen.
- Easy to use. Only two clicks are required to compare all film control layers.
- Quick display and layer priority controls built in.
- Run only selected layers or all layers.
- Also runs in the ALLEGRO\_VIEWER\_PLUS editor to avoid tying up an Allegro license.



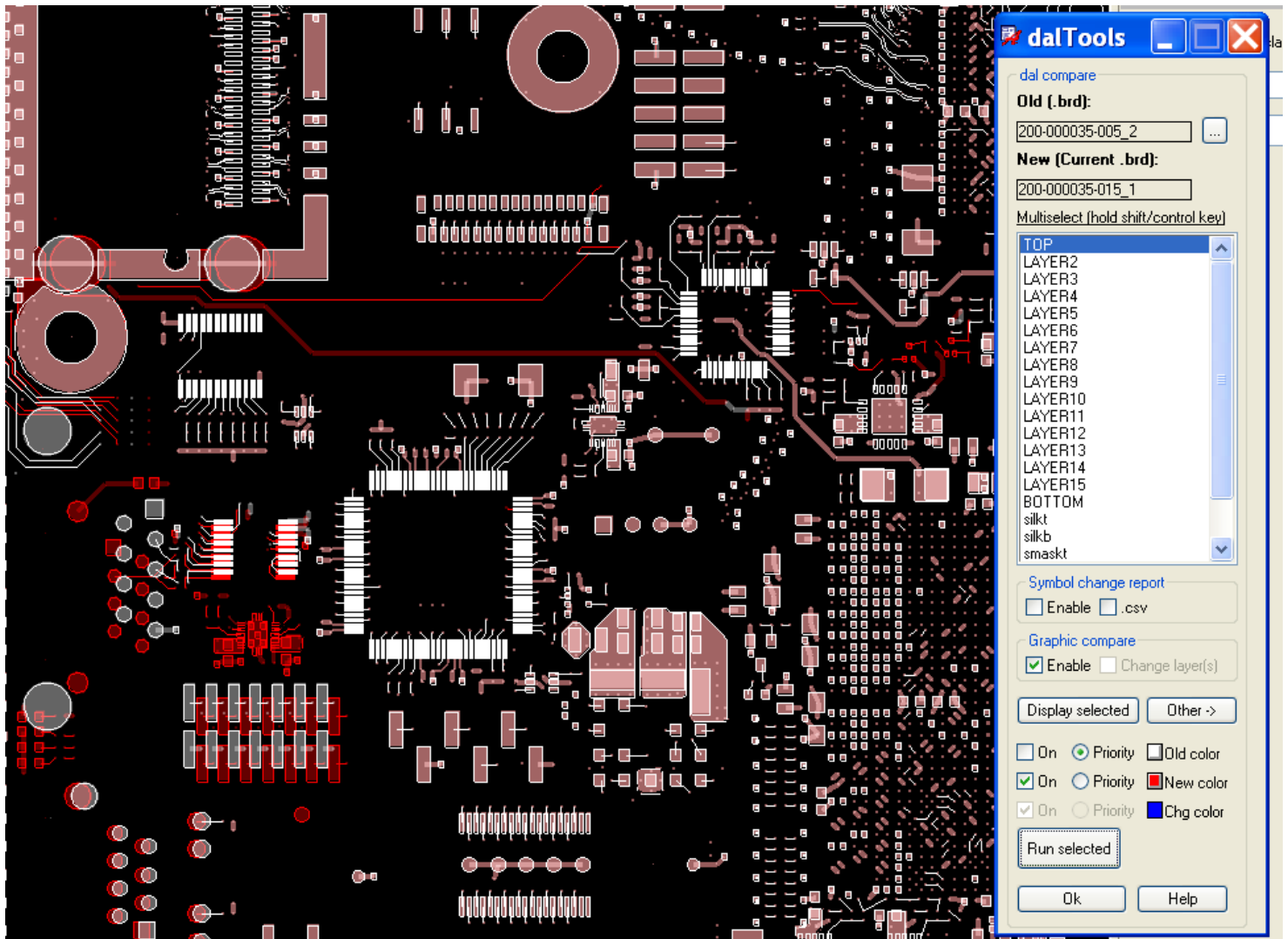
## Example 1

---



[Soldermask layer changes stand out](#)

## Example 2



The dark red items denote changes to the top layer

# Symbol report

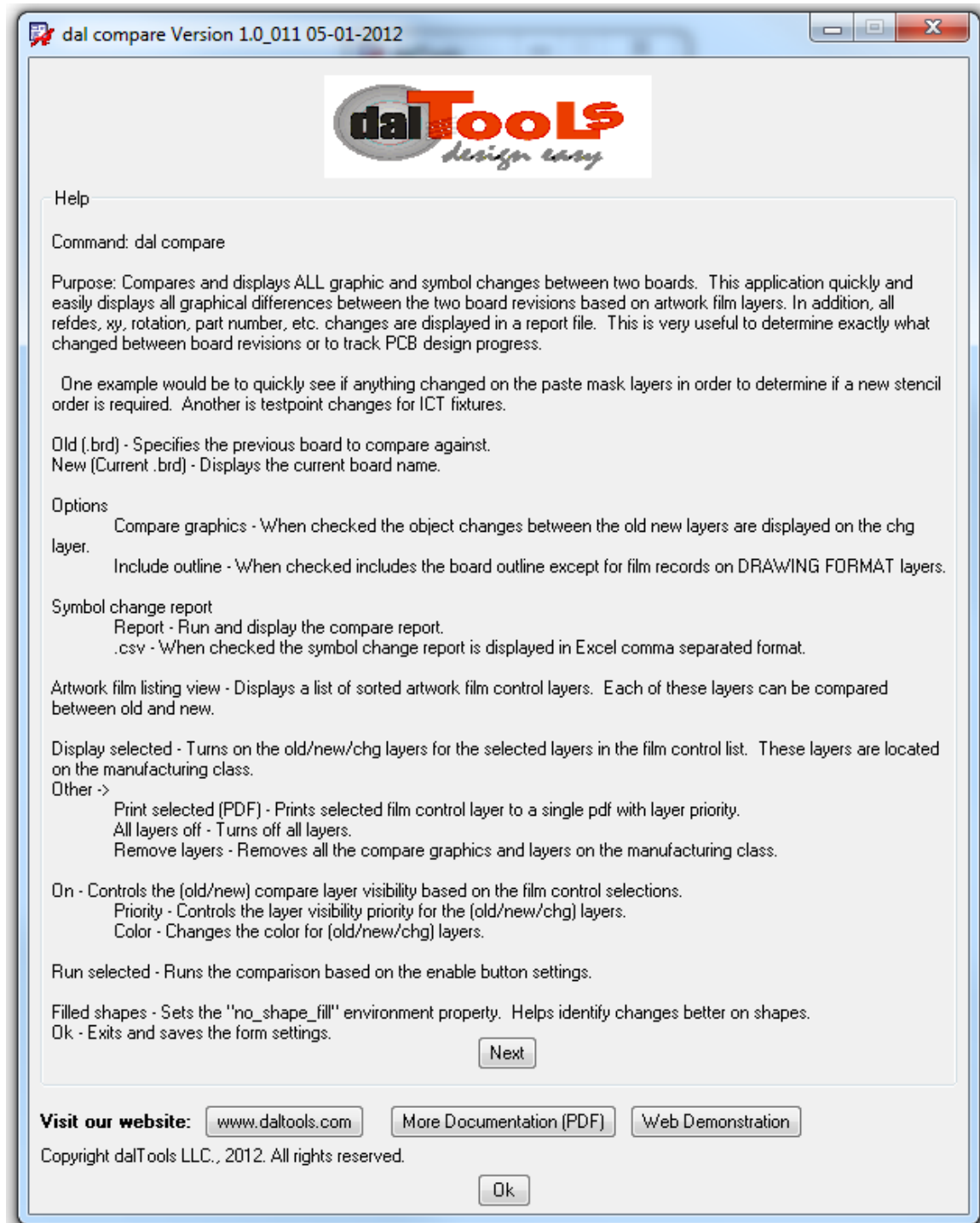
## Report Window

File Close Help

HalTools - Compare report  
 Date: Jan 12 10:38:41 2012  
 200-000035-005\_2.brd [Old]  
 200-000035-015\_1.brd [New]

Summary:  
 29 Added symbols  
 4 Deleted symbols  
 83 Changed symbols

#	Brd	Type	Refdes	XV(mils)	Side	Rot	Sytype	Part number	Device type
1	[New]	Added:	*	(820.00,800.00)	T	0.00	REWORKWIREHOLE40		
2	[New]	Added:	C139_MPB	(770.00,1380.00)	T	90.00	SM_0603C	402-000010-011	BYPASS_CAP_NPOL_S
3	[New]	Added:	C140_MPB	(705.00,1340.00)	T	0.00	SM_0402C	402-000010-026	BYPASS_CAP_NPOL_S
4	[New]	Added:	C141_MPB	(565.00,1485.00)	T	270.00	SM_0402C	402-000010-006	BYPASS_CAP_NPOL_S
5	[New]	Added:	C142_MPB	(560.00,1375.00)	T	270.00	SM_0603C	402-000010-011	BYPASS_CAP_NPOL_S
6	[New]	Added:	J6	(155.00,1750.00)	T	270.00	TYCO_RJ45_RA_RP	410-000140-001	IC
7	[New]	Added:	M10	(-105.00,2100.00)	B	270.00	RA632NUTPLATE	320-000062-001	MECHANICAL
8	[New]	Added:	Q2	(2985.00,2445.00)	T	0.00	VMT3	405-000010-001	IC
9	[New]	Added:	Q3	(3135.00,2465.00)	T	0.00	VMT3	405-000010-001	IC
10	[New]	Added:	R144_MPB	(775.00,1480.00)	T	90.00	SM_0402R	400-000010-010	RESISTOR_SMT-0402
11	[New]	Added:	R145_MPB	(525.00,1485.00)	T	90.00	SM_0402R	400-000010-097	RESISTOR_SMT-0402
12	[New]	Added:	R146_MPB	(485.00,1485.00)	T	90.00	SM_0402R	400-000010-010	RESISTOR_SMT-0402
13	[New]	Added:	R147_MPB	(525.00,1560.00)	T	90.00	SM_0402R	400-000010-020	RESISTOR_SMT-0402
14	[New]	Added:	R148_MPB	(485.00,1560.00)	T	90.00	SM_0402R	400-000010-065	RESISTOR_SMT-0402
15	[New]	Added:	R149_MPB	(-40.00,1149.00)	T	0.00	SM_0402R	400-000010-006	RESISTOR_SMT-0402
16	[New]	Added:	R150_MPB	(4490.00,2915.00)	B	270.00	SM_0402R	400-000010-074	RESISTOR_SMT-0402
17	[New]	Added:	R166	(2906.00,2418.00)	T	0.00	SM_0402R	400-000010-010	RESISTOR_SMT-0402
18	[New]	Added:	R175	(3060.00,2485.00)	T	0.00	SM_0402R	400-000010-010	RESISTOR_SMT-0402
19	[New]	Added:	R203	(2840.00,2640.00)	B	270.00	SM_0402R	400-000010-030	RESISTOR_SMT-0402
20	[New]	Added:	R204	(2960.00,2565.00)	B	270.00	SM_0402R	400-000010-040	RESISTOR_SMT-0402
21	[New]	Added:	R207	(3195.00,2465.00)	T	270.00	SM_0402R	400-000014-011	RESISTOR_SMT-0402
22	[New]	Added:	R47_MPB	(3010.00,2265.00)	B	90.00	SM_0402R	400-000010-007	RESISTOR_SMT-0402
23	[New]	Added:	R48_MPB	(720.00,1540.00)	T	180.00	SM_0402R	400-000010-010	RESISTOR_SMT-0402
24	[New]	Added:	R70_SW	(3755.00,4000.00)	B	0.00	SM_0402R	400-000010-074	RESISTOR_SMT-0402
25	[New]	Added:	R71_SW	(3755.00,3960.00)	B	180.00	SM_0402R	400-000010-074	RESISTOR_SMT-0402
26	[New]	Added:	RWRK	(5712.00,3648.00)	T	0.00	REWORKWIREHOLE40		
27	[New]	Added:	SB_PG_MPB	(-140.00,1149.00)	T	180.00	SM_0603_LED	404-000001-003	DISCRETE
28	[New]	Added:	TP10_MPB	(810.00,1475.00)	T	270.00	TP_020_VIA		IC
29	[New]	Added:	U11_MPB	(665.00,1440.00)	T	90.00	PVSON-N10	450-000081-001	IC
1	[Old]	Deleted:	C46	(2720.00,2500.00)	T	270.00	SM_0402C	402-000010-001	BYPASS_CAP_NPOL_S
2	[Old]	Deleted:	R164	(4895.00,3290.00)	T	90.00	SM_0402R	400-000014-011	RESISTOR_SMT-0402
3	[Old]	Deleted:	R165	(4855.00,3290.00)	T	90.00	SM_0402R	400-000014-011	RESISTOR_SMT-0402
4	[Old]	Deleted:	U9	(301.61,1889.37)	T	90.00	DB9_RA	410-000120-001	IC
1	[New]	Changed:	C110_MPB	(5045.00,1000.00)	B	90.00	SM_0603C	402-000050-014	TIMING_CAP_NPOL_S
1	[Old]	Changed:	C110_MPB	(5045.00,1000.00)	B	90.00	SM_0603C	402-000050-016	TIMING_CAP_NPOL_S
2	[New]	Changed:	C18_MPB	(4580.00,3490.00)	T	0.00	SM_0402C	402-000010-005	BYPASS_CAP_NPOL_S
2	[Old]	Changed:	C18_MPB	(4530.00,3495.00)	T	0.00	SM_0402C	402-000010-005	BYPASS_CAP_NPOL_S



## Help (cont)

