

# Integr8tor

*Practical automated  
data input and analysis*

Dear Customer,

Mania Belgium is proud to present you the latest release 3.2.1 of Integr8tor.

The screenshot displays the Integr8tor software interface. At the top, the title bar reads 'MANIA TECHNOLOGIE Integr8tor' and the user is logged in as 'demo'. Below the title bar is a job queue table with columns: Id, Locked, Original Data, Customer, Location, Progress, Prio, Submit Time, and Duration. The queue contains several jobs, including 'Multi.zip' and 'Flash96.zip'. Below the queue is a status bar with various counters. The main interface is divided into two panes. The left pane shows a file list with columns: Update, Save, FileName, Format, Function, Position, Polarity, and Size. The right pane shows a PCB image of a multi-layer board, labeled 'layer1.274x', with a zoom level of 77.3%. The PCB image includes a legend and a title 'MULTI REV:A FEB 1999' and 'SALBERG MASK00BP'. At the bottom of the interface, there are several warning messages related to drill tool size and unknown layers.

## Highlights of Integr8tor Version 3.2.1

- Jobs that take longer to process than a user-set time-out value are terminated. This avoids the system hanging or very heavy jobs blocking the queue, and ensures that all regular jobs are processed without delay
- Better recognition of tools and apertures
- Better recognition of the stack-up
- Improved recognition algorithm results in fewer warning messages, less false alarms and improved security
- Clearer messages
- New copper fill % field on QR Report
- Much better recognition of buried and blind via's
- Support for 64-bit (AMD64) Windows platforms. This allows you to process extremely heavy jobs that fail on standard 32-bit systems. The 64-bit upgrade is a cost item, but is free for users with a maintenance contract or under warranty
- Bug fixes

## Highlights of Integr8tor Version 3.1.3 (previous release)

- Accelerated loading/rendering performance of circuit images
- Single undefined apertures, used for outlines in copper layers, are now replaced by a zero size circle. This improves the quality of the reports.
- Bug fixes

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## Next major release

We are working on the next major release; highlights are

- Drill tool size wizard allows to enter or modify tool sizes in GUI
- Editable fields in quotation reports

## Quotation Report samples

	Type	Min. Track	Min. Clr.	Min. Ring	Min. Clr. to PLT	Min. Clr. to NPLT	Min. Clr. Outline	Area	Fill
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[dm <sup>2</sup> ]	[%]
1. MAX4DBIT 48V.TOP	Cu	0.203	0.178	0.126	0.422	0.085	0.000	0.558	37
2. MAX4DBIT 48V.IN1	Cu	>0.500	0.166	0.126	0.356	NA	0.000	1.280	84
3. MAX4DBIT 48V.IN2	Cu	0.254	0.381	0.126	NA	NA	0.000	1.092	72
4. MAX4D.IT 48V.BOT	Cu	0.203	0.381	0.126	NA	NA	0.000	0.585	38
<b>MINMIN:</b>		<b>0.203</b>	<b>0.166</b>	<b>0.126</b>	<b>0.356</b>	<b>0.085</b>	<b>0.000</b>		

	Type	Nr	End Dia	Holes	Span
			[mm]		
drill.exc	plated	1	0.40	1104	1-6
drill.exc	plated	2	0.50	16	1-6
drill.exc	plated	3	0.60	36	1-6
drill.exc	plated	5	0.85	8	1-6
drill.exc	plated	8	3.50	4	1-6
drill.exc	non-plated	4	0.80	1	1-6
drill.exc	non-plated	6	1.20	1	1-6
drill.exc	non-plated	7	1.60	2	1-6

  

	Type	Holes	Sizes	Smallest	Largest	Min.Ring	Min.Clr.Copper
				[mm]	[mm]	[mm]	[mm]
1-6	plated	1168	5	0.40	3.50	0.217	0.348
1-6	non-plated	4	3	0.80	1.60		0.150
<b>TOTAL:</b>		<b>1172</b>	<b>8</b>				

Copper Layers	6
Drill Layers	1
Rout Layers	0
Soldermask	2
Legend	2
Paste	0

  

Total Drill Holes	1172
Smallest Drill Hole	0.40 mm
Largest Drill Hole	3.50 mm
Drill Hole Density	786 /dm2

  

Overall Smallest Trackwidth	0.150 mm
Overall Smallest Clearance	0.150 mm
Overall Smallest Ring	0.217 mm

	Function	Position
1. brasage_top.art	pastemask	top
2. vernis_top.art	soldermask	top
3. serigraphie_top.art	legend	top
4. serigraphie_bot.art	legend	bottom
5. vernis_bot.art	soldermask	bottom
6. brasage_bot.art	pastemask	bottom

	X Size	Y Size	Length
	[mm]	[mm]	[mm]
Outline	145.1	106.7	518.4
Copper Image	144.5	104.4	497.8