

- 1 Material: Isola IS400 or similar recommended
- 2 Finish: ENIG (Electroless Nickel Immersion Gold), nickel layer  $1 \div 4 \mu\text{m}$ , gold layer  $0.076 \div 0.2 \mu\text{m}$
- 3 All gerber files generated as a top view
4. Fabricate according IPC-A-600
5. Non-conductive epoxy ink recommended for silkscreen
6. Silkscreen should not cover any exposed copper, silkscreen gerber data have to be trimmed eventually
7. All holes diameter refer to final diameter after eventual plating

#### Gerber and drill file extensions table

Gerber files	Description
.GTO	Top side silkscreen
.GTP	Top side solder paste mask
.GTS	Top side solder mask
.GTL	L1_TOP - Top Layer
.GBL	L2_BOTTOM - Bottom Layer
.GBS	Bottom side solder mask
.GBP	Bottom side solder paste mask
.GBO	Bottom side silkscreen
.GM1	Board outline
<b>Drill files</b>	
.TXT	Layer pair L1_TOP to L2_BOTTOM Layer

#### DCDC\_converter\_for\_IGBT\_flyback\_NCV3064

PCB fabrication notes and requirements

Engineer: Peter Dubravka

Date: 21.05.2020

PCB File: DCDC\_for\_IGBT\_driver\_flyback\_NCV3064\_V3.PcbD

Repository revision: not in repository revision

Revision:  
rev. 1.2

State:  
released

Fabrication  
document

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1 / 13

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Layer Stack

Material	Layer	Thickness	Dielectric Material	Type	Gerber
	Top Overlay			Legend	GTO
Surface Material	Top Solder	0.0102mm(0.400mil)	Solder Resist	Solder Mask	GTS
Copper	Top Layer	0.0711mm(2.800mil)		Signal	GTL
Core		1.5240mm(60.000mil)	FR-4	Dielectric	
Copper	Bottom Layer	0.0711mm(2.800mil)		Signal	GBL
Surface Material	Bottom Solder	0.0102mm(0.400mil)	Solder Resist	Solder Mask	GBS
	Bottom Overlay			Legend	GBO
Total thickness: 1.6866mm(66.400mil)					

B


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DCDC_converter_for_IGBT_flyback_NCV3064		Revision: rev. 1.2	State: released
Layer stack details		Fabrication document	Sheet 2 / 13
Engineer: Peter Dubravka	Date: 21.05.2020		
PCB File: DCDC_for_IGBT_driver_flyback_NCV3064_V3.PcbD		ON Semiconductor Solution Engineering Center Piestany	
Repository revision: not in repository revision			

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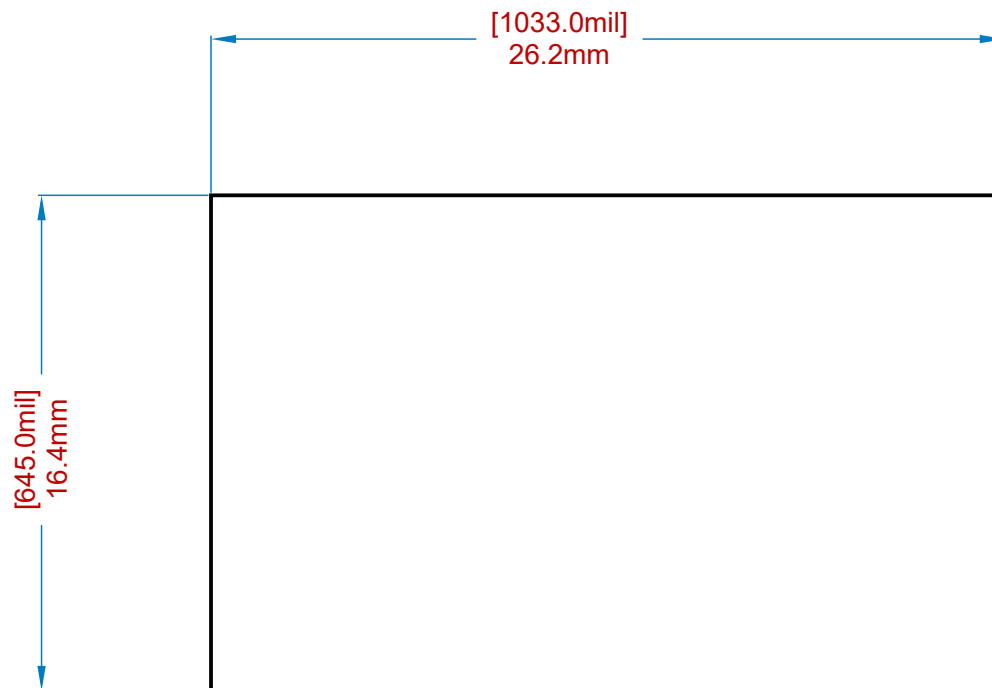
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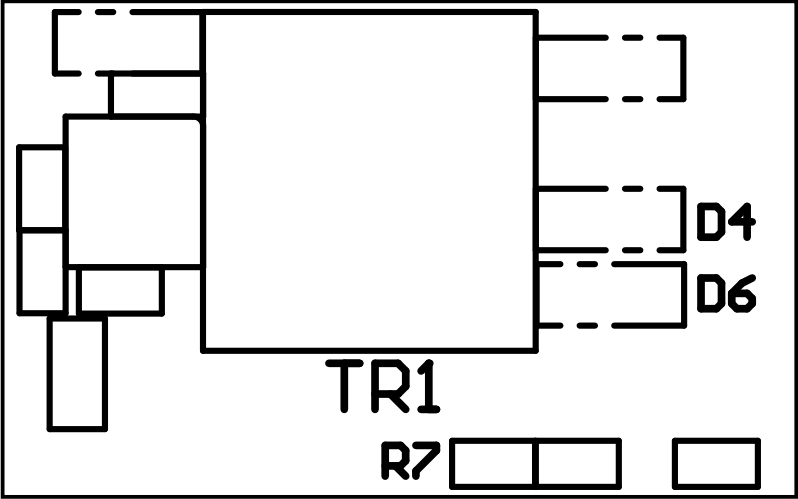
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<b>DCDC_converter_for_IGBT_flyback_NCV3064</b>		<b>Revision:</b> rev. 1.2	<b>State:</b> released
<i>Board outline definition - top view 2:3</i>		Fabrication document	Sheet 3 / 13
Engineer: Peter Dubravka	Date: 21.05.2020		
PCB File: DCDC_for_IGBT_driver_flyback_NCV3064_V3.PcbD		<b>ON Semiconductor</b> Solution Engineering Center Piestany	
Repository revision: not in repository revision			



Top Overlay (Scale 4:1)



DCDC_converter_for_IGBT_flyback_NCV3064		Revision: rev. 1.2	State: released
Top side silkscreen - top view		Fabrication document	Sheet 4 / 13
Engineer: Peter Dubravka	Date: 21.05.2020		
PCB File: DCDC_for_IGBT_driver_flyback_NCV3064_V3.PcbD		ON Semiconductor Solution Engineering Center Piestany	
Repository revision: not in repository revision			



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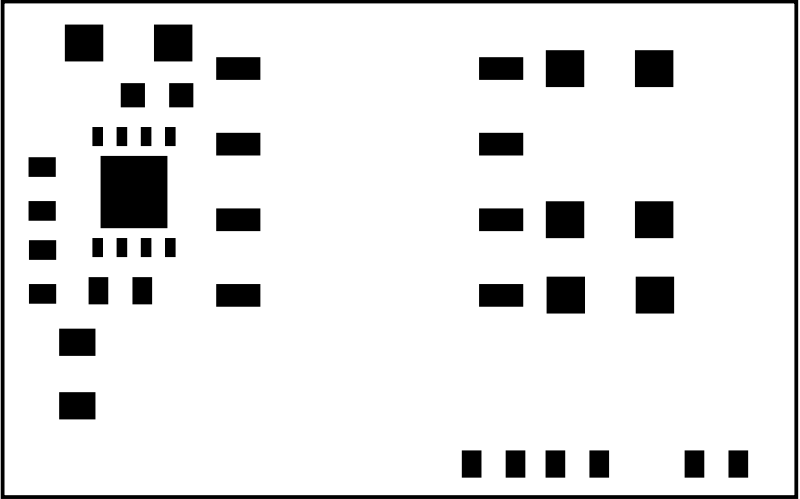
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Top Paste (Scale 4:1)



<b>DCDC_converter_for_IGBT_flyback_NCV3064</b>		<b>Revision:</b> rev. 1.2	<b>State:</b> released
<i>Top side solder paste - top view</i>		Fabrication document	Sheet 5 / 13
Engineer: Peter Dubravka	Date: 21.05.2020		
PCB File: DCDC_for_IGBT_driver_flyback_NCV3064_V3.PcbD		<b>ON Semiconductor</b> Solution Engineering Center Piestany	
Repository revision: not in repository revision			



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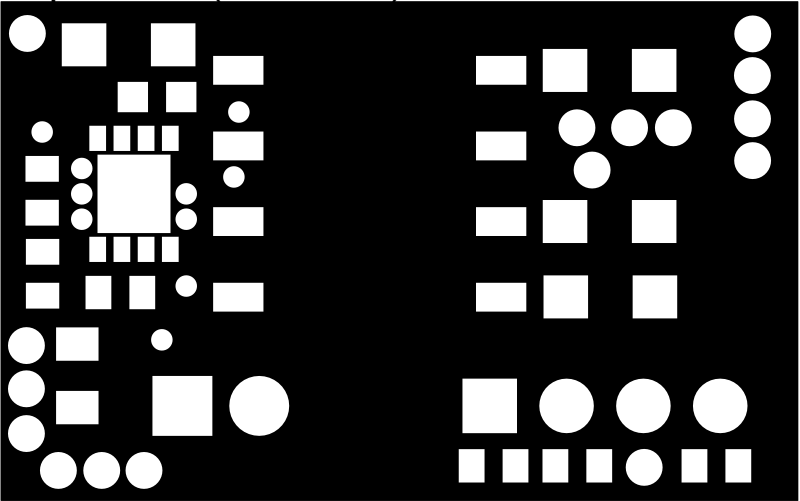
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Top Solder (Scale 4:1)



DCDC_converter_for_IGBT_flyback_NCV3064		Revision: rev. 1.2	State: released
Top side solder mask - top view		Fabrication document	Sheet 6 / 13
Engineer: Peter Dubravka	Date: 21.05.2020		
PCB File: DCDC_for_IGBT_driver_flyback_NCV3064_V3.PcbD		<b>ON Semiconductor</b> Solution Engineering Center Piestany	
Repository revision: not in repository revision			



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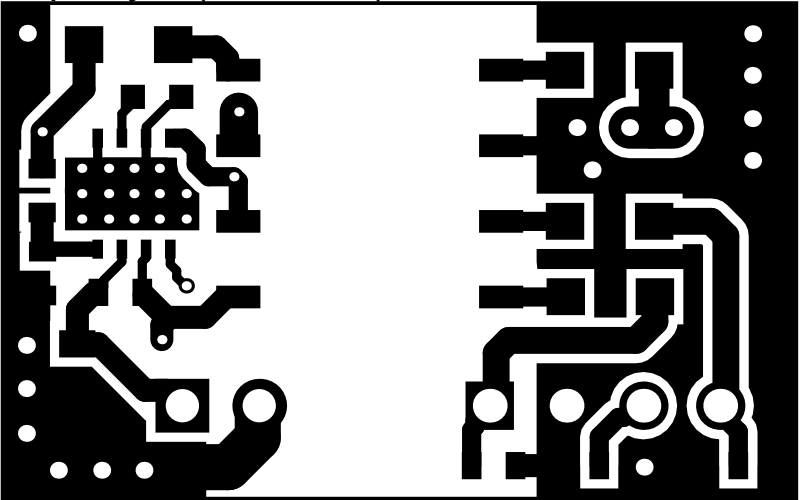
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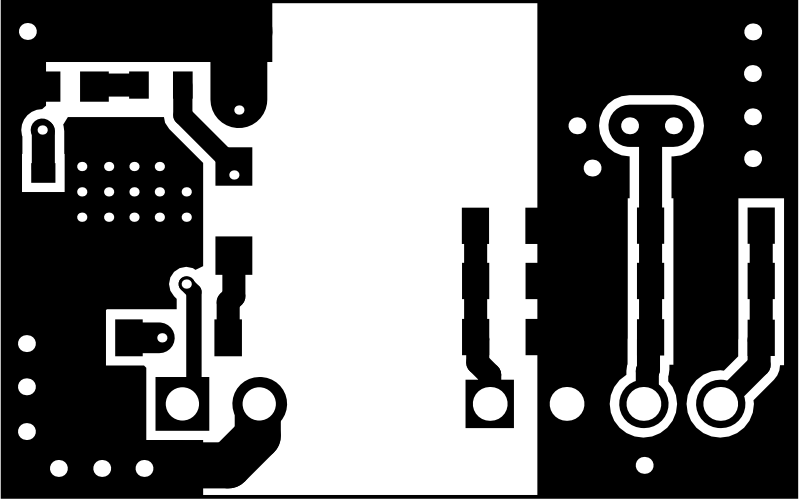
Top Layer (Scale 4:1)



DCDC_converter_for_IGBT_flyback_NCV3064		Revision: rev. 1.2	State: released
Top Layer - top view		Fabrication document	Sheet 7 / 13
Engineer: Peter Dubravka	Date: 21.05.2020		
PCB File: DCDC_for_IGBT_driver_flyback_NCV3064_V3.PcbD		<b>ON Semiconductor</b> Solution Engineering Center Piestany	
Repository revision: not in repository revision			



Bottom Layer (Scale 4:1)



DCDC_converter_for_IGBT_flyback_NCV3064		Revision: rev. 1.2	State: released
Bottom Layer - top view		Fabrication document	Sheet 8 / 13
Engineer: Peter Dubravka	Date: 21.05.2020		
PCB File: DCDC_for_IGBT_driver_flyback_NCV3064_V3.PcbD		<b>ON Semiconductor</b> Solution Engineering Center Piestany	
Repository revision: not in repository revision			





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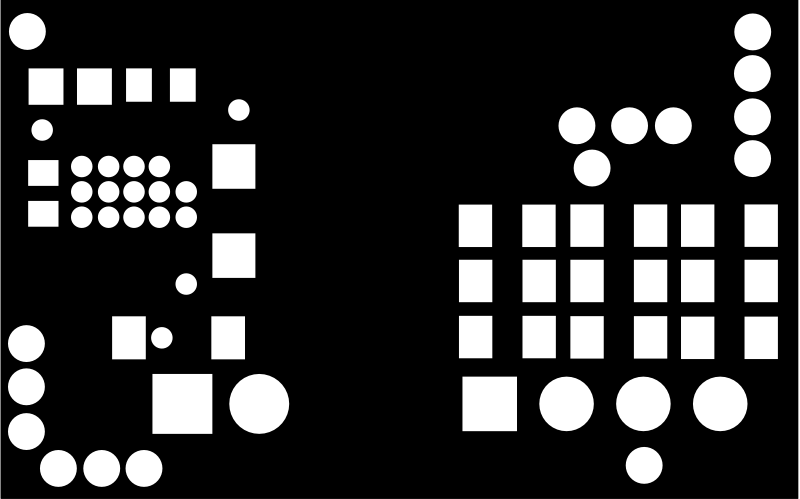
C

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Bottom Solder (Scale 4:1)



DCDC_converter_for_IGBT_flyback_NCV3064		Revision: rev. 1.2	State: released
Bottom side solder mask - top view		Fabrication document	Sheet 9 / 13
Engineer: Peter Dubravka	Date: 21.05.2020		
PCB File: DCDC_for_IGBT_driver_flyback_NCV3064_V3.PcbD		<b>ON Semiconductor</b> Solution Engineering Center Piestany	
Repository revision: not in repository revision			



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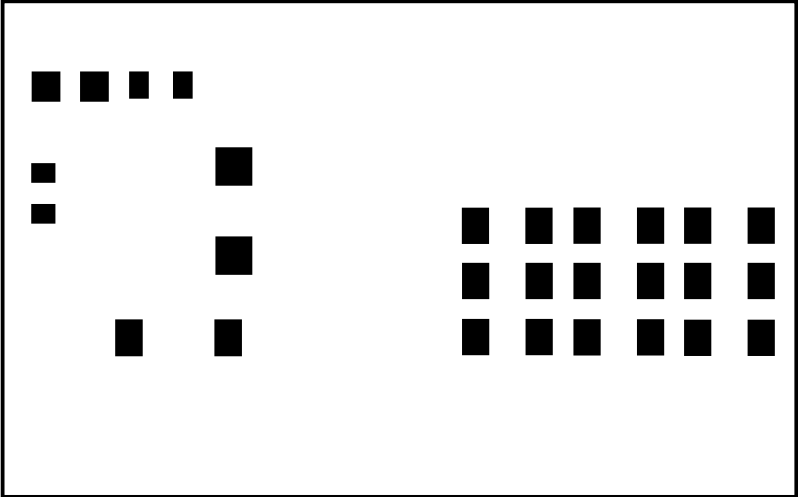
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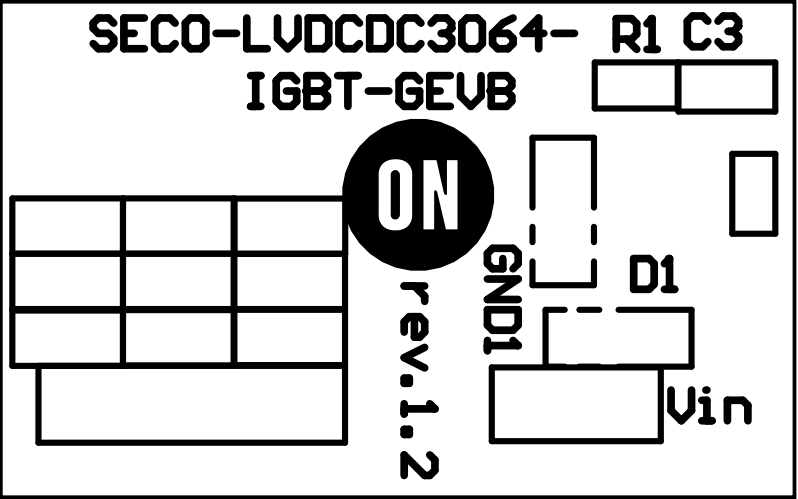
Bottom Paste (Scale 4:1)




DCDC_converter_for_IGBT_flyback_NCV3064		Revision: rev. 1.2	State: released
Bottom side solder paste - top view		Fabrication document	Sheet 10 / 13
Engineer: Peter Dubravka	Date: 21.05.2020		
PCB File: DCDC_for_IGBT_driver_flyback_NCV3064_V3.PcbD		<b>ON Semiconductor</b> Solution Engineering Center Piestany	
Repository revision: not in repository revision			

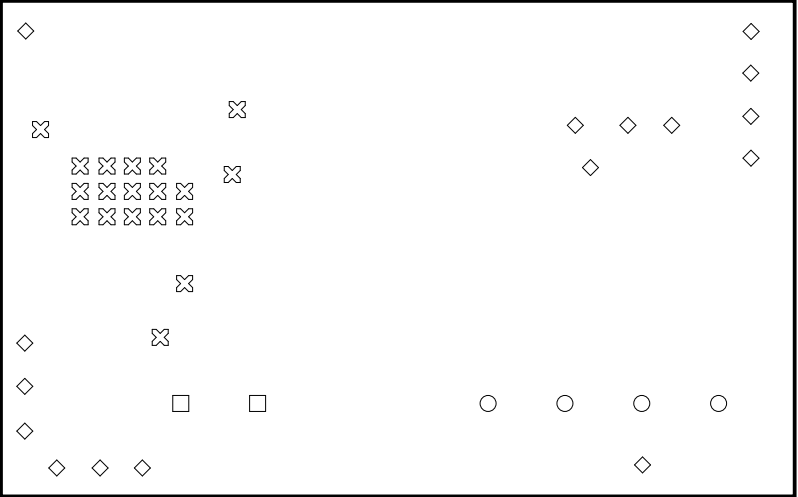


Bottom Overlay (Scale 4:1)



DCDC_converter_for_IGBT_flyback_NCV3064		Revision: rev. 1.2	State: released
Bottom side silkscreen - bottom view		Fabrication document	Sheet 11 / 13
Engineer: Peter Dubravka	Date: 21.05.2020		
PCB File: DCDC_for_IGBT_driver_flyback_NCV3064_V3.PcbD		ON Semiconductor Solution Engineering Center Piestany	
Repository revision: not in repository revision			

Drill Drawing View (Scale 4:1)



8 Related drill table can be found on page 13

DCDC_converter_for_IGBT_flyback_NCV3064		Revision: rev. 1.2	State: released
Drill drawing		Fabrication document	Sheet 12 / 13
Engineer: Peter Dubravka	Date: 21.05.2020		
PCB File: DCDC_for_IGBT_driver_flyback_NCV3064_V3.PcbD		<b>ON Semiconductor</b> Solution Engineering Center Piestany	
Repository revision: not in repository revision			



Drill Table

Symbol	Count	Hole Size	Plated	Drill Layer Pair	Via / Pad	Template
⊗	19	0.305mm(12.0mil)	Plated	Top Layer - Bottom Layer	Via	v51h30
◇	16	0.559mm(22.0mil)	Plated	Top Layer - Bottom Layer	Via	v102h56
□	2	1.100mm(43.3mil)	Plated	Top Layer - Bottom Layer	Pad	(Mixed)
○	4	1.118mm(44.0mil)	Plated	Top Layer - Bottom Layer	Pad	(Mixed)
	41 Total					

9 Related drill drawing can be found on page 12

DCDC_converter_for_IGBT_flyback_NCV3064		Revision: rev. 1.2	State: released
Drill table		Fabrication document	Sheet 13 / 13
Engineer: Peter Dubravka	Date: 21.05.2020		
PCB File: DCDC_for_IGBT_driver_flyback_NCV3064_V3.PcbD			
Repository revision: not in repository revision		ON Semiconductor Solution Engineering Center Piestany	