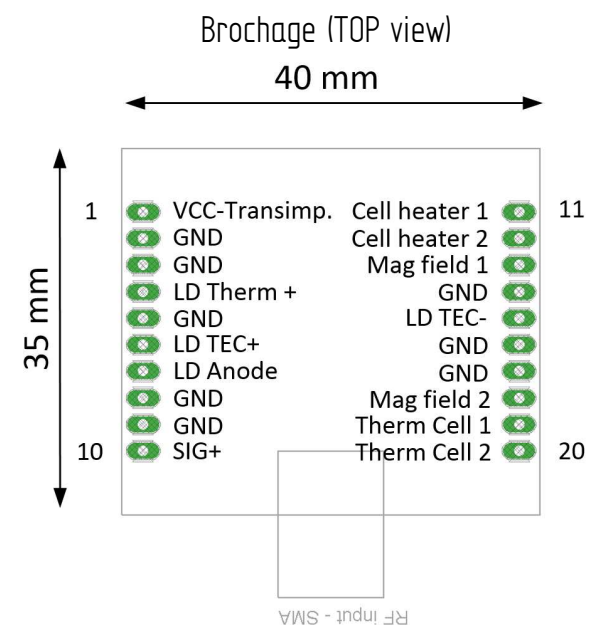
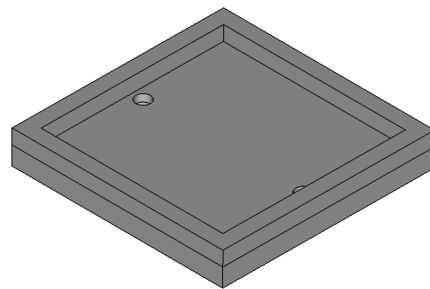
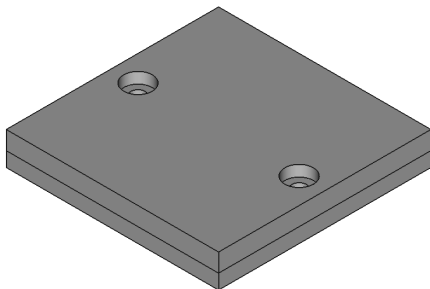
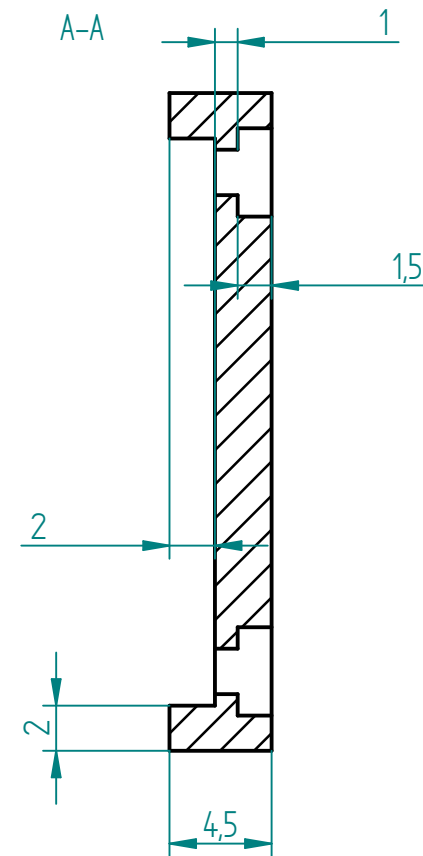
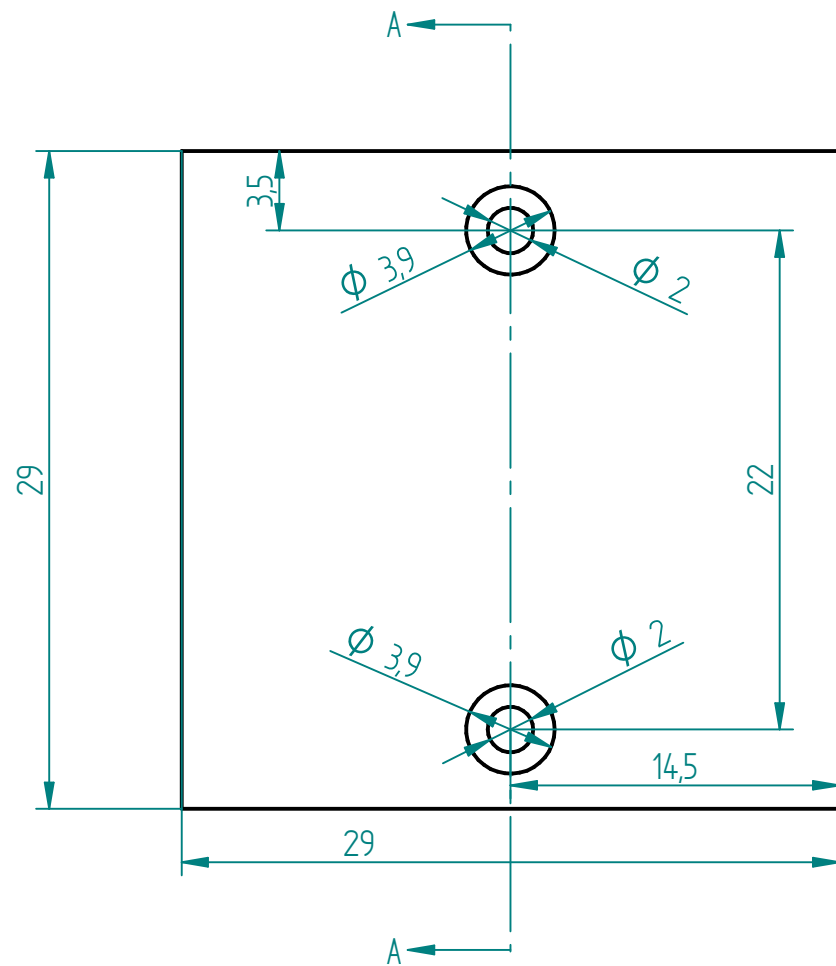


Sous-Ensembles			
Numéro	Description	Matériau	Page
1	Capot	Polyamide	2
2	Assemblage Photodiode	FR4	3-4
3	Entretoise	Polyamide	5
4	Assemblage Module Physique	-	-
5	Assemblage VCSEL	FR4	6-8



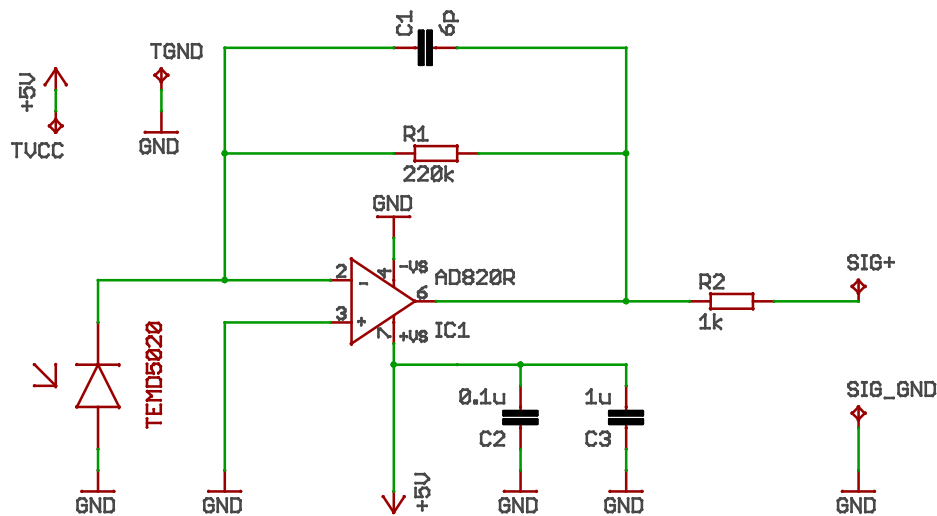
	NAME	DATE	Dessin d'ensemble	
DRAWN	J. Rutkowski	04/22/16		
Institut FEMTO-ST 15B Avenue des Montboucons 25030 Besancon, France			SIZE A4	REV 1.1
SCALE:		WEIGHT:	PAGE 1 OF 8	



	NAME	DATE	Capot		
DRAWN	J. Rutkowski	04/22/16			
Institut FEMTO-ST 15B Avenue des Montboucons 25030 Besancon, France			SIZE A4	Demonstrateur MAC	REV 1.1
			SCALE:	WEIGHT:	PAGE 2 OF 8

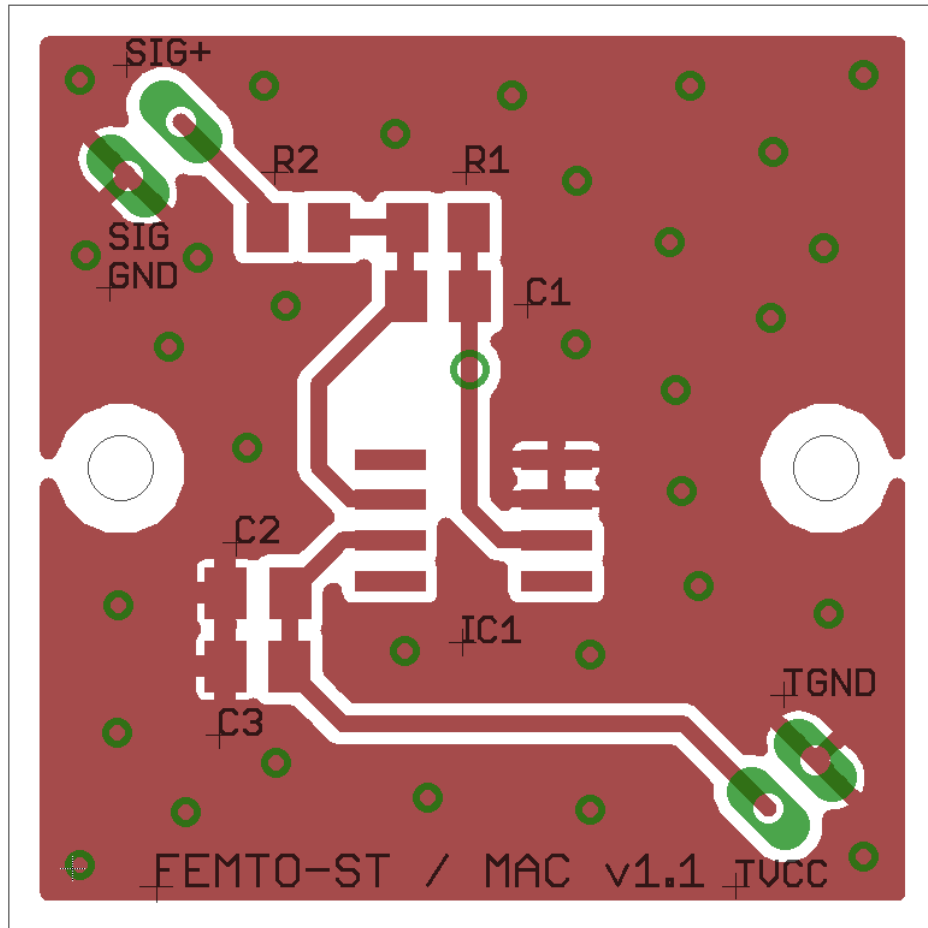
Bill of Materials

Name	Value	Package	Description	Manufacturer	MPN	Farnell PN	Approx. Unit Price
C1	6p	0805	Condensateur céramique, 6 pF, $\pm 0.5\text{pF}$, C0G / NP0, 50 V	MULTICOMP	MC0805N6R0D500CT	1759185	0,0578
C2	0,1u	0805	Condensateur céramique, 0.1 μF , $\pm 10\%$, X7R, 50 V	WALSIN	0805B104K500CT	2496944	0,0172
C3	1u	0805	Condensateur céramique, Série C, 1 μF , $\pm 10\%$, X7R, 25 V	KEMET	C0805C105K3RACTU	1637035	0,0636
R1	220k	0805	Résistance CMS, Couche mince, 220 kohm, 100 mW, $\pm 0.1\%$, 100 V	SUSUMU	RR1220P-224-B-T5	1653300	0,534
R2	1k	0805	Résistance CMS, Couche métallique, 1 kohm, 125 mW, $\pm 0.1\%$, 200 V	PANASONIC	ERA6ARB102V	1717624	1,21
D1		SMD	PHOTODIODE 900NM 5 2MM	VISHAY	TEMD5020X01	2251275	1,25
IC1		SOIC-8	Amplificateur opérationnel, Simple	ANALOG DEVICES	AD820ARZ	9426469	4,01

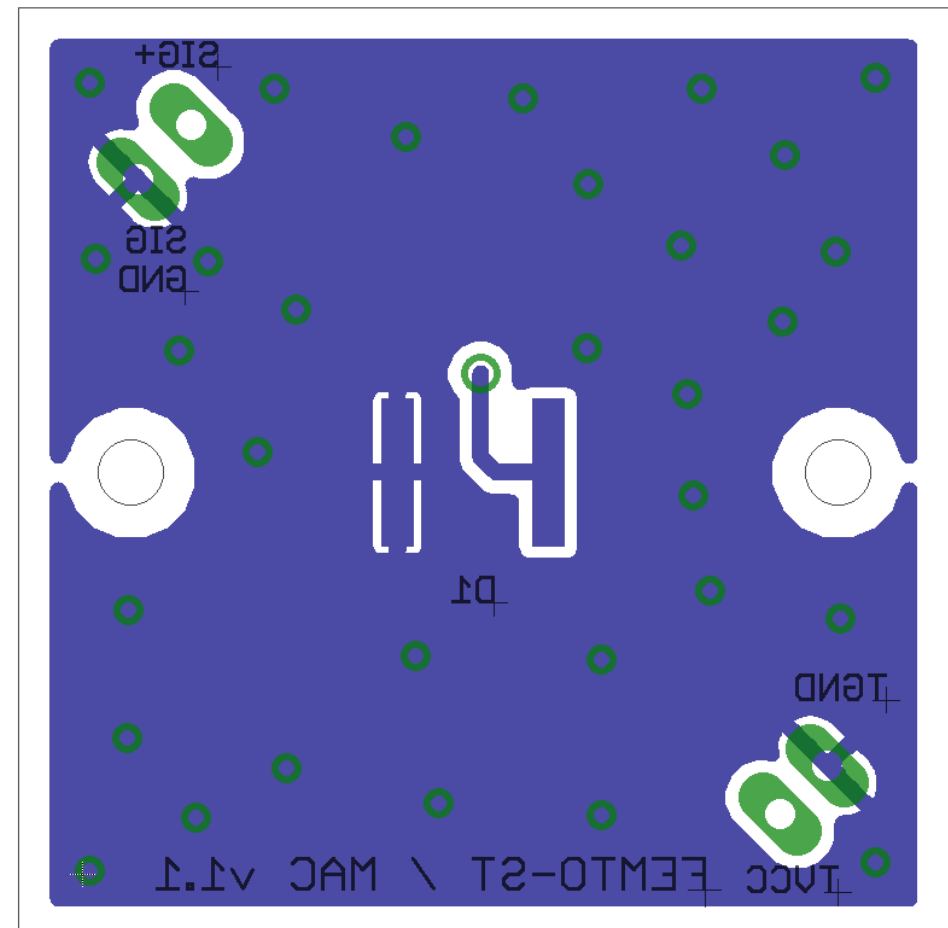


	NAME	DATE	Assemblage Photodiode (1/2)		
DRAWN	J. Rutkowski	04/22/16	SIZE A4	Demonstrateur MAC	REV 1.1
Institut FEMTO-ST 15B Avenue des Montboucons 25030 Besancon, France			SCALE:	WEIGHT:	PAGE 3 OF 8

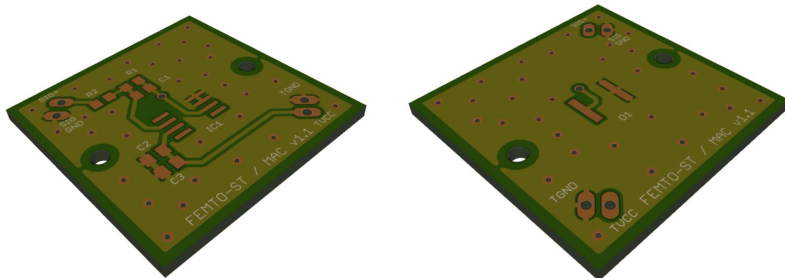
Couche TOP



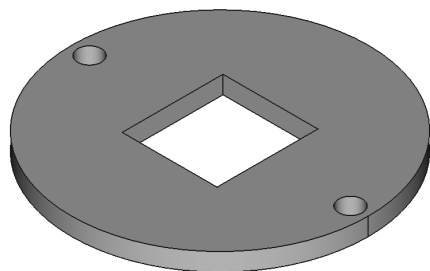
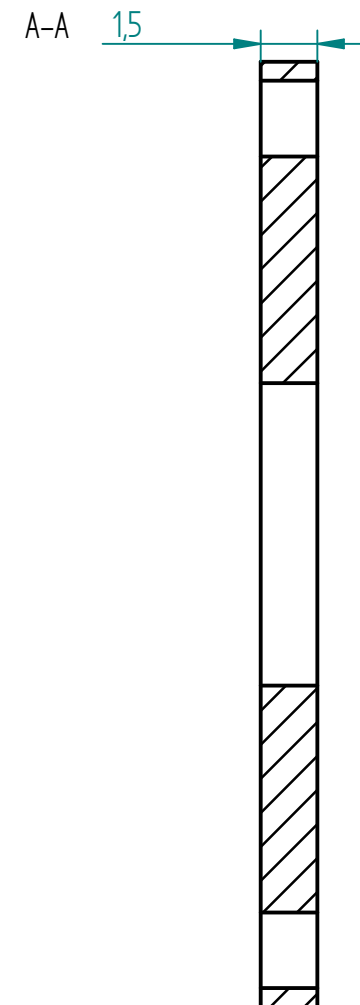
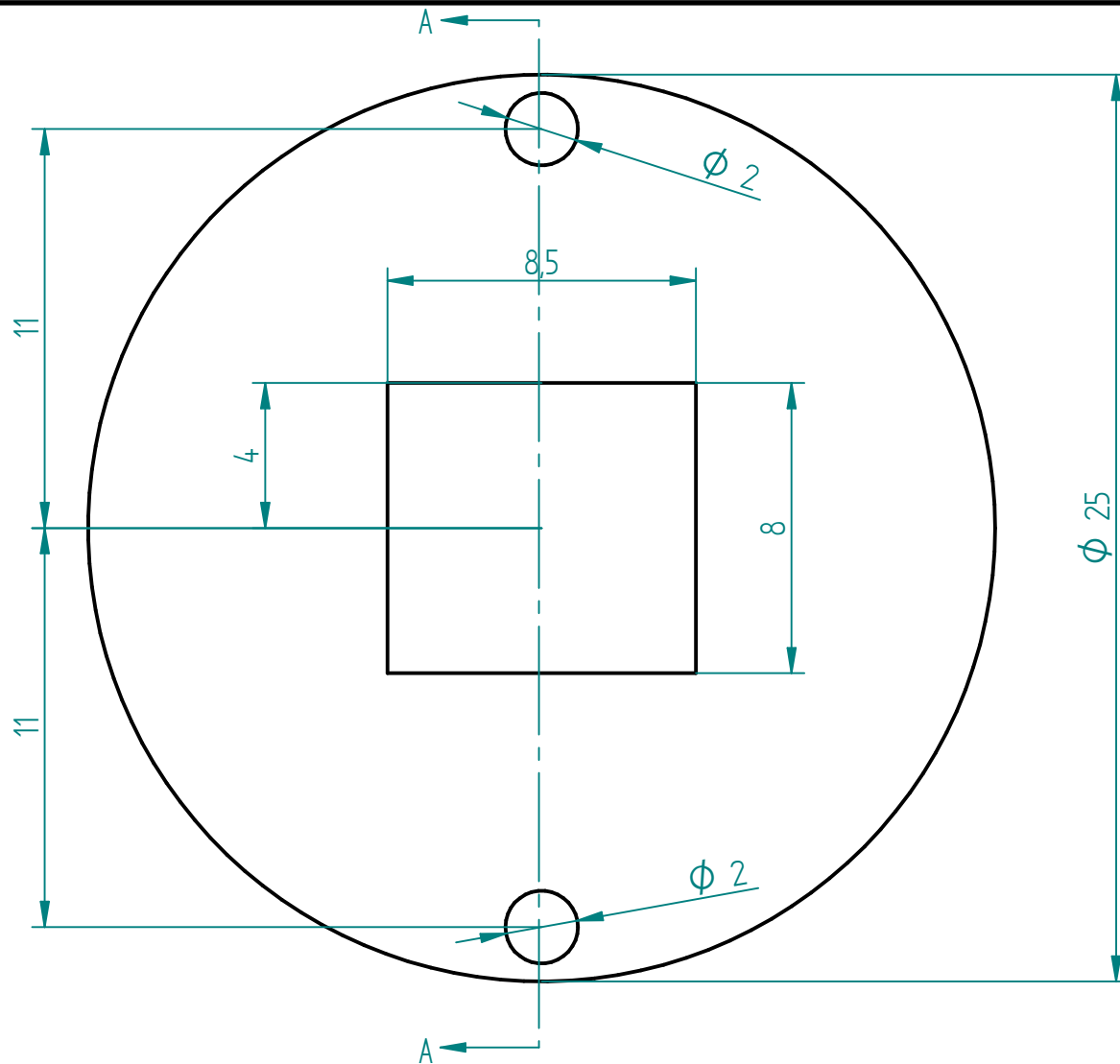
Couche BOTTOM



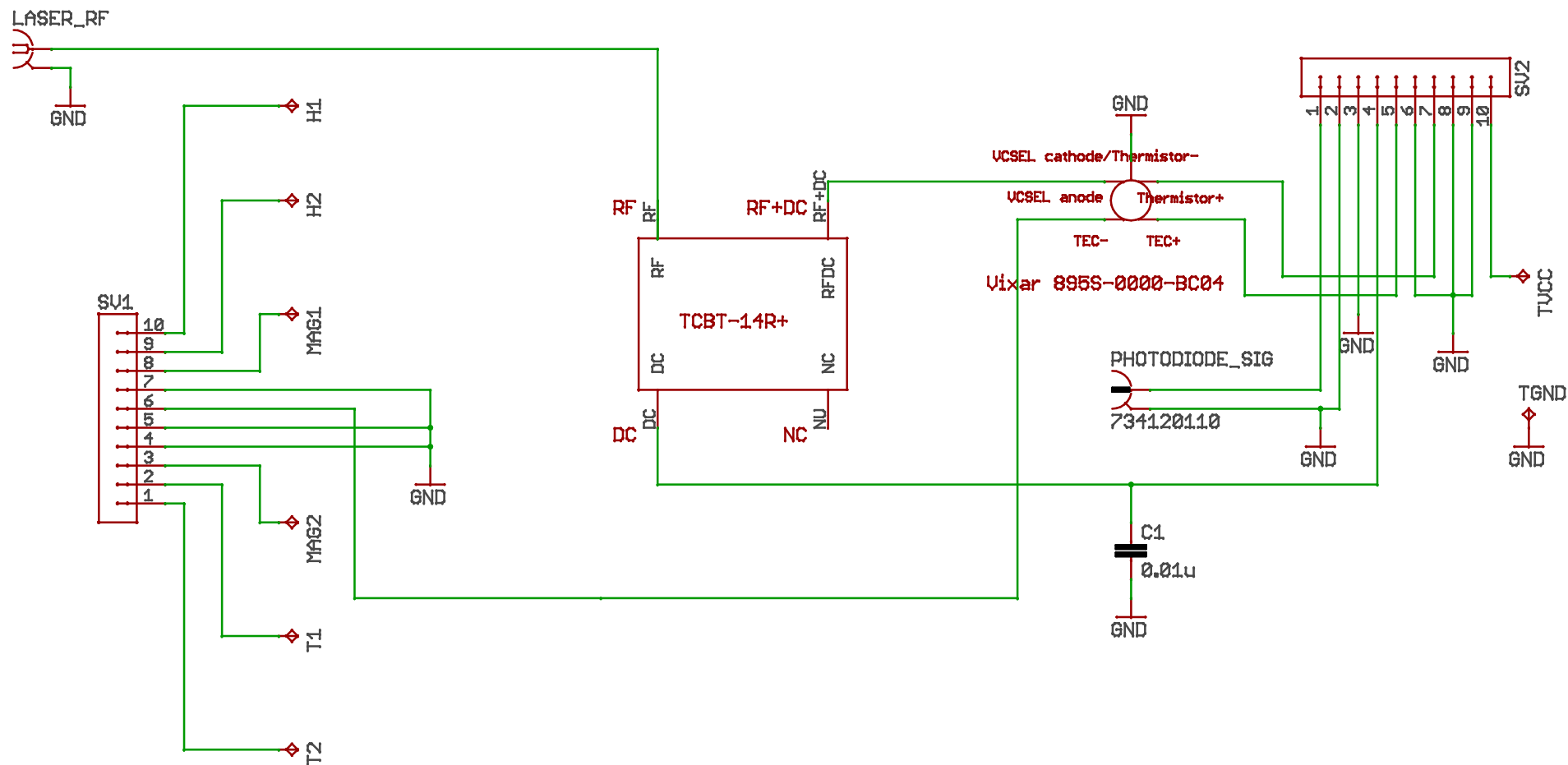
Dimensions de la plaque 29 x 29 mm



	NAME	DATE	Assemblage Photodiode (2/2)		
DRAWN	J. Rutkowski	04/22/16			
Institut FEMTO-ST 15B Avenue des Montboucons 25030 Besancon, France			SIZE A4	Demonstrateur MAC	REV 1.1
SCALE:		WEIGHT:		PAGE 4 OF 8	



	NAME	DATE	Entretoise		
DRAWN	J. Rutkowski	04/22/16			
Institut FEMTO-ST 15B Avenue des Montboucons 25030 Besancon, France			SIZE A4	Demonstrateur MAC	REV 1.1
SCALE:		WEIGHT:		PAGE 5 OF 8	

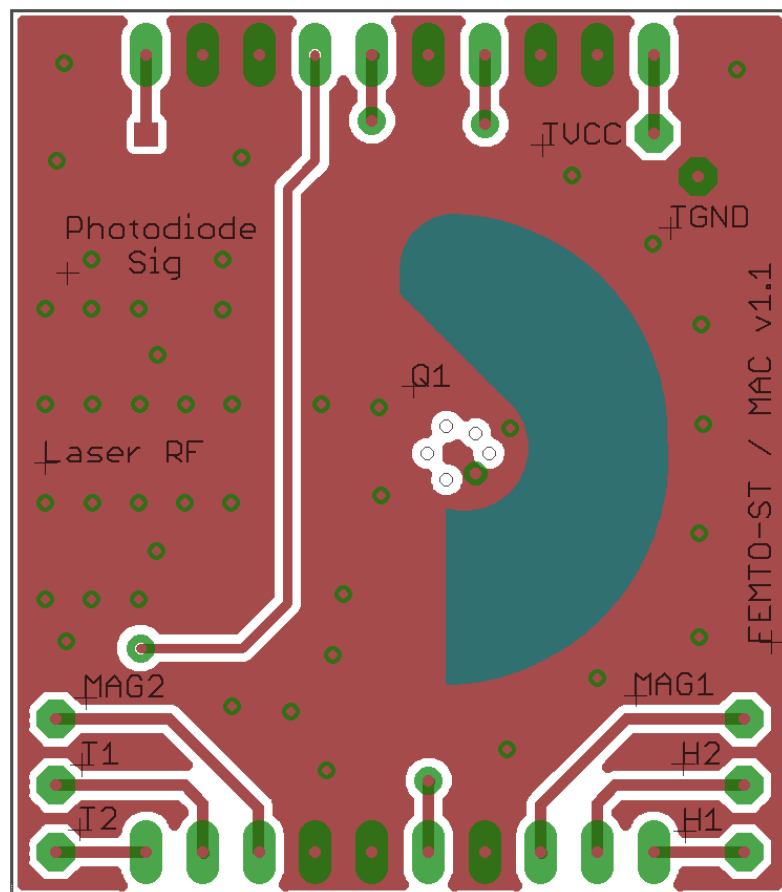


Câblage

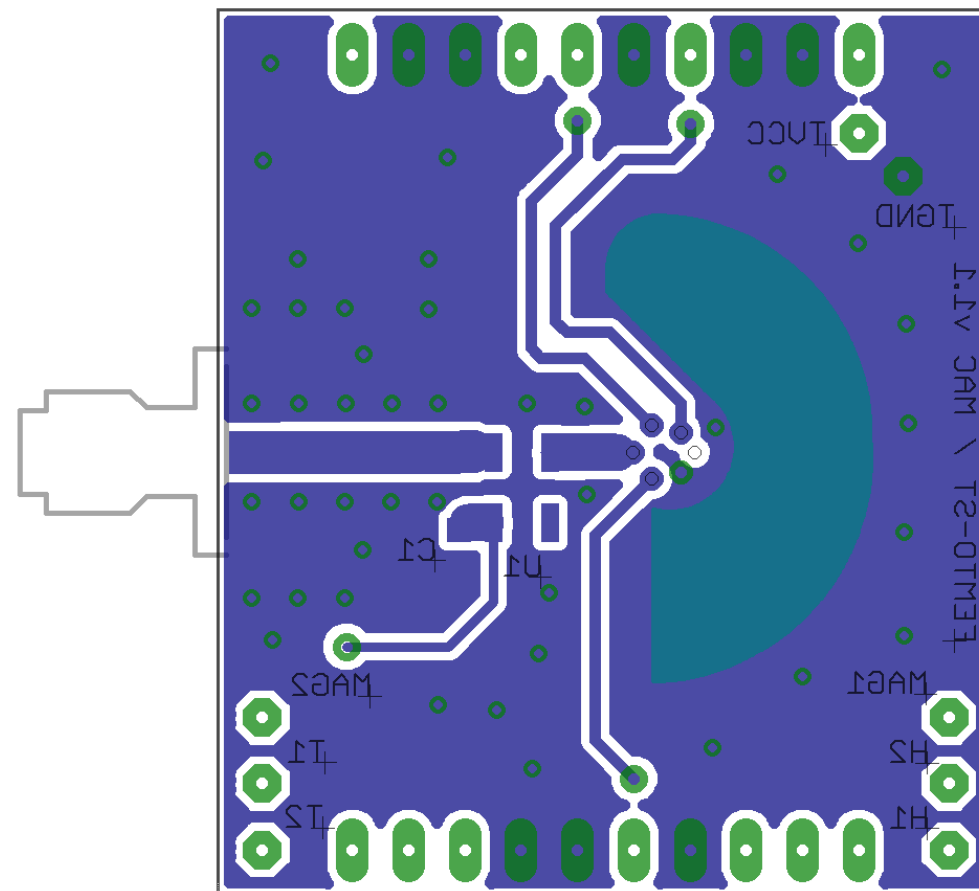
Pads	Description
H1 et H2	Résistance de chauffe cellule
MAG1 et MAG2	Bobine de champs magnétique
T1 et T2	Thermistance de la cellule
TVCC	Alimentation de l'amplificateur Transimpédance
TGND	Masse de l'amplificateur Transimpédance

	NAME	DATE	Assemblage VCSEL (1/3)		
DRAWN	J. Rutkowski	04/22/16			
Institut FEMTO-ST 15B Avenue des Montboucons 25030 Besancon, France			SIZE A4	Demonstrateur MAC	REV 1.1
			SCALE:	WEIGHT:	PAGE 6 OF 8

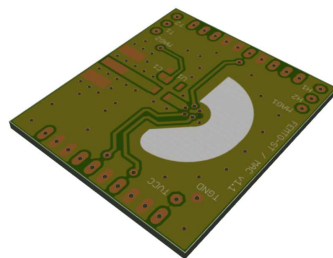
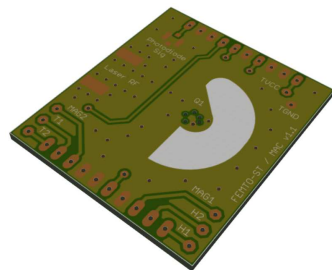
Couche TOP



Couche BOTTOM



Dimensions de la plaque 35 x 40 mm



	NAME	DATE	Assemblage VCSEL (2/3)	
DRAWN	J. Rutkowski	04/22/16		
Institut FEMTO-ST 15B Avenue des Montboucons 25030 Besancon, France			SIZE A4	Demonstrateur MAC
			SCALE:	WEIGHT:
			PAGE 7 OF 8	
			REV 1.1	

Bill of Materials

Name	Value	Package	Description	Manufacturer	MPN	Distributor	Distributor PN	Quantity	Approx. Unit Price
C1	0.01u	0603	Condensateur céramique multicouche CMS, 0.01 µF, ± 5%, X7R, 50 V	WALSIN	0603B103J500CT	Farnell	2496824	1	0,0117
LASER_RF		SMA	Coaxial SMA, Jack droit, A souder, 50 ohm, Cuivre-béryllium	JOHNSON	142-0701-851	Farnell	1019325	1	4,97
PHOTODIODE_SIG		U.FL	Coaxial RF, Jack droit, Montage en surface vertical, 50 ohm, Laiton	MOLEX	73412-0110	Farnell	1340200	1	0,784
Q1		TO-46	895±0.5 nm single mode VCSEL on a TO can six leaded can with TEC & Thermistor	VIXAR	895S-0-BC02	Laser 2000	VIX-895S-0000-BC04	1	400
SV1, SV2			Connecteur carte-à-carte, Bas Profil, Série BBL, Traversant, Embase, 10, 2.54 mm	SAMTEC	BBL-110-G-E	Farnell	1667438	2	4,05
U1		PL-146	Surface Mount Bias-Tee, 50 Ohm, Wideband 10 MHz to 10 GHz	Mini-Circuits	TCBT-14R+	Elexience	TCBT-14R+	1	10

	NAME	DATE	Assemblage VCSEL (3/3)		
DRAWN	J. Rutkowski	04/22/16			
Institut FEMTO-ST 15B Avenue des Montboucons 25030 Besancon, France			SIZE A4	Demonstrateur MAC	REV 1.1
			SCALE:	WEIGHT:	PAGE 8 OF 8