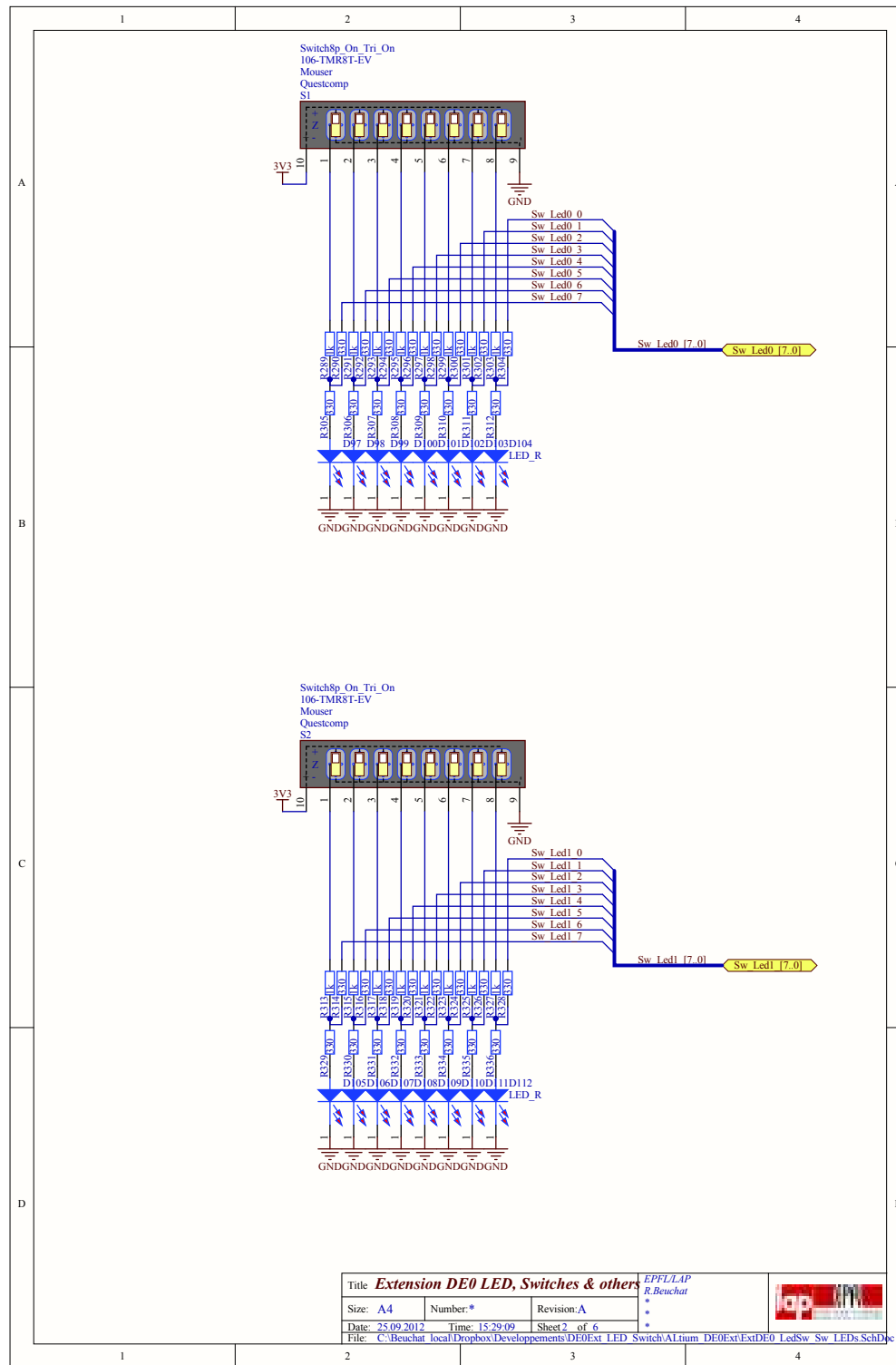


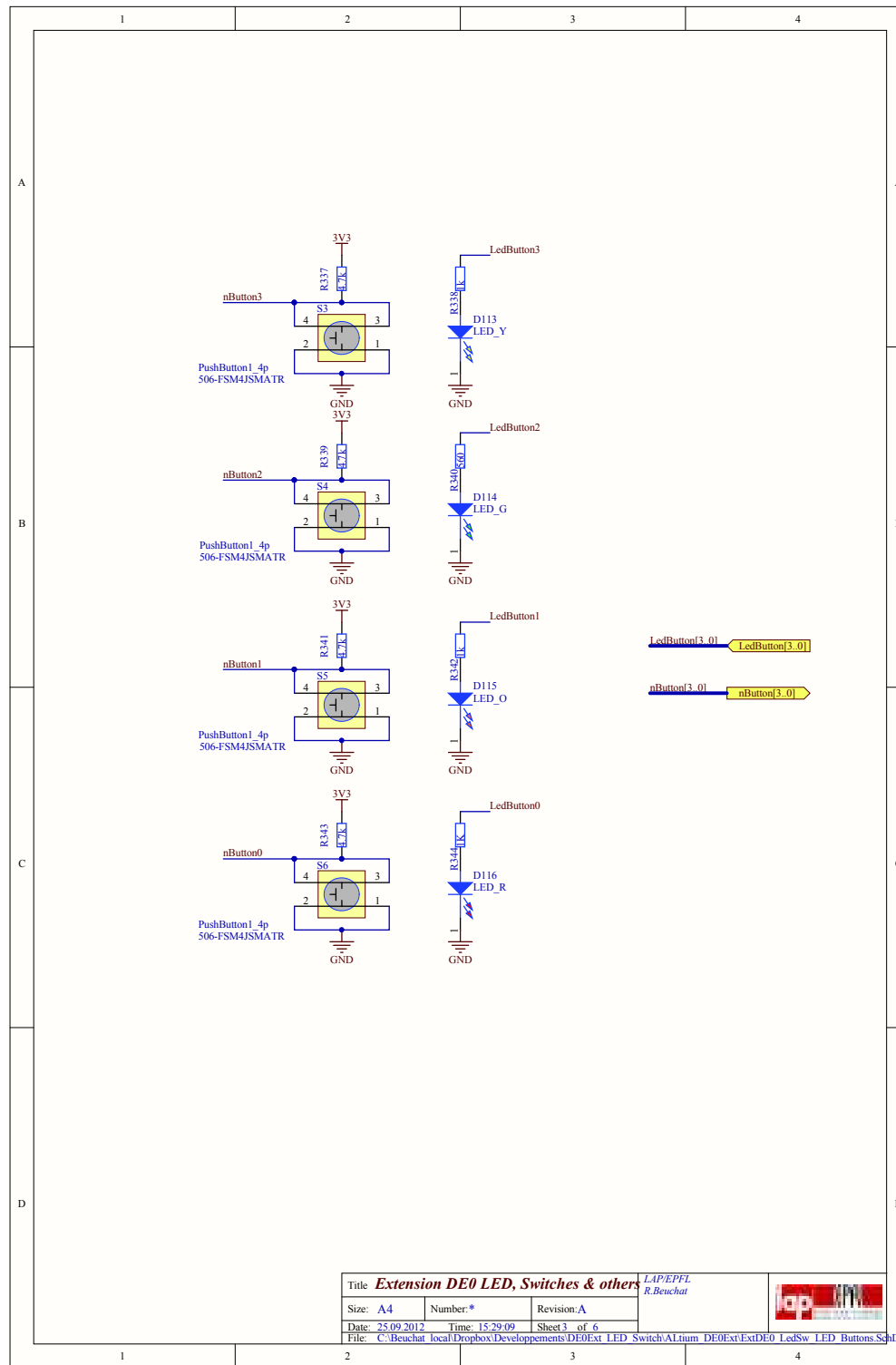
Title <b>Extension DE0 LED, Switches &amp; others</b>			EPFL/LAP R.Beuchat
Size: A4	Number:*	Revision:A	*
Date: 25.09.2012	Time: 15:29:08	Sheet 1 of 6	*
File: C:\Beuchat\local\Dropbox\Developpements\DE0Ext_LED_Switch\Altium_DE0Ext\ExtDE0_LedSw_top.SchDoc			

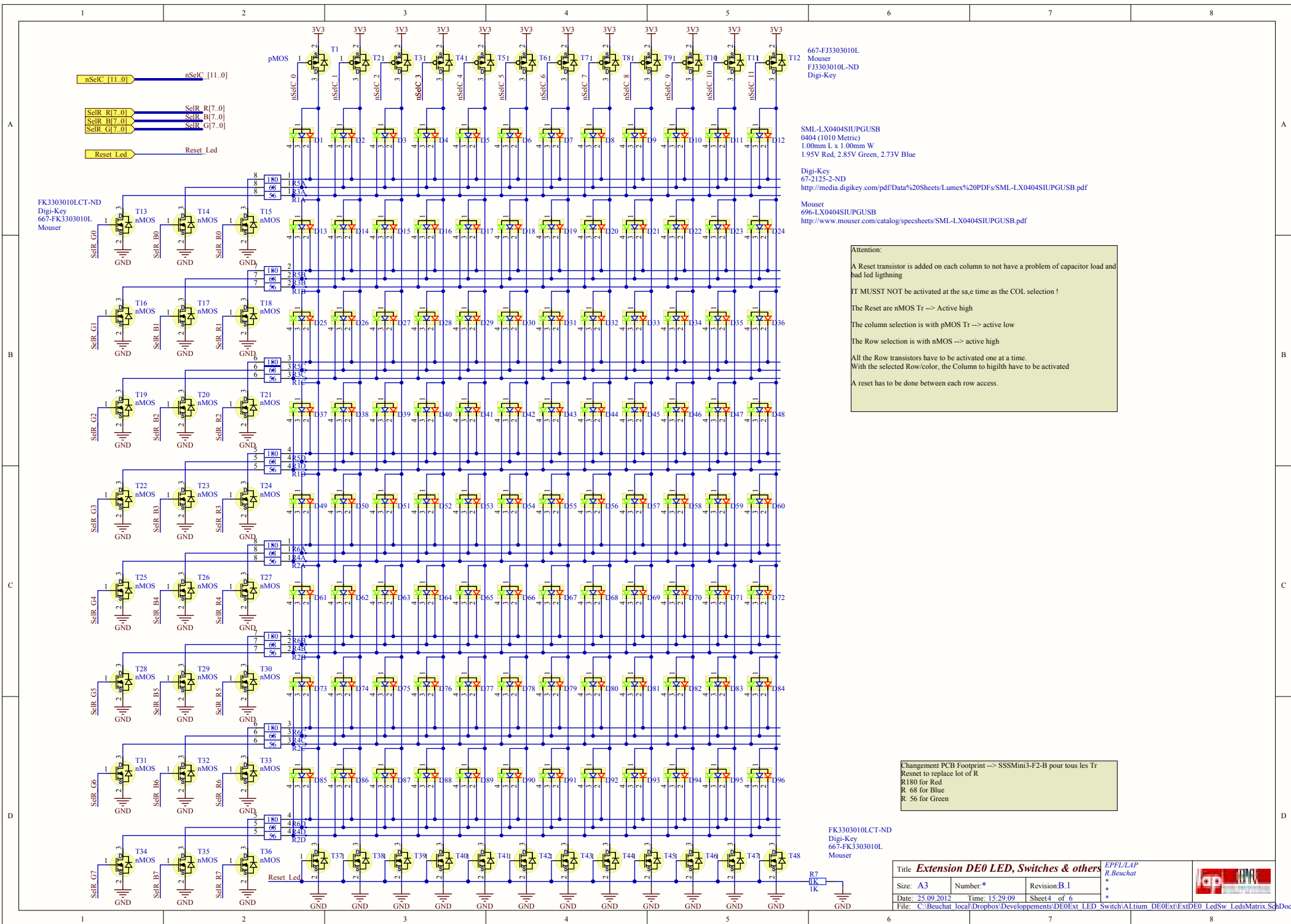




Title <b>Extension DE0 LED, Switches &amp; others</b>			EPFL/LAP R.Beuchat
Size: A4	Number: *	Revision: A	*
Date: 25/09/2012	Time: 15:29:09	Sheet 2 of 6	*
File: C:\Beuchat\local\Dropbox\Developpements\DE0\EXT_LED_Switch\ALtium_DE0\Ext\DE0_LedSw_Sw_LEDs.SchDoc			







667-FJ3303010L  
Mouser  
FJ3303010L-ND  
Digi-Key

SML-LX0404SIUPGUSB  
0404 (1010 Metric)  
1.00mm L x 1.00mm W  
1.95V Red, 2.85V Green, 2.73V Blue

Digi-Key  
67-2125-2-ND  
<http://media.digikey.com/pdf/Data%20Sheets/Lumex%20PDFs/SML-LX0404SIUPGUSB.pdf>

Mouser  
696-LX0404SIUPGUSB  
<http://www.mouser.com/catalog/specsheets/SML-LX0404SIUPGUSB.pdf>

**Attention:**

A Reset transistor is added on each column to not have a problem of capacitor load and bad led lightning

IT MUST NOT be activated at the same time as the COL selection !

The Reset are nMOS Tr --> Active high

The column selection is with pMOS Tr --> active low

The Row selection is with nMOS --> active high

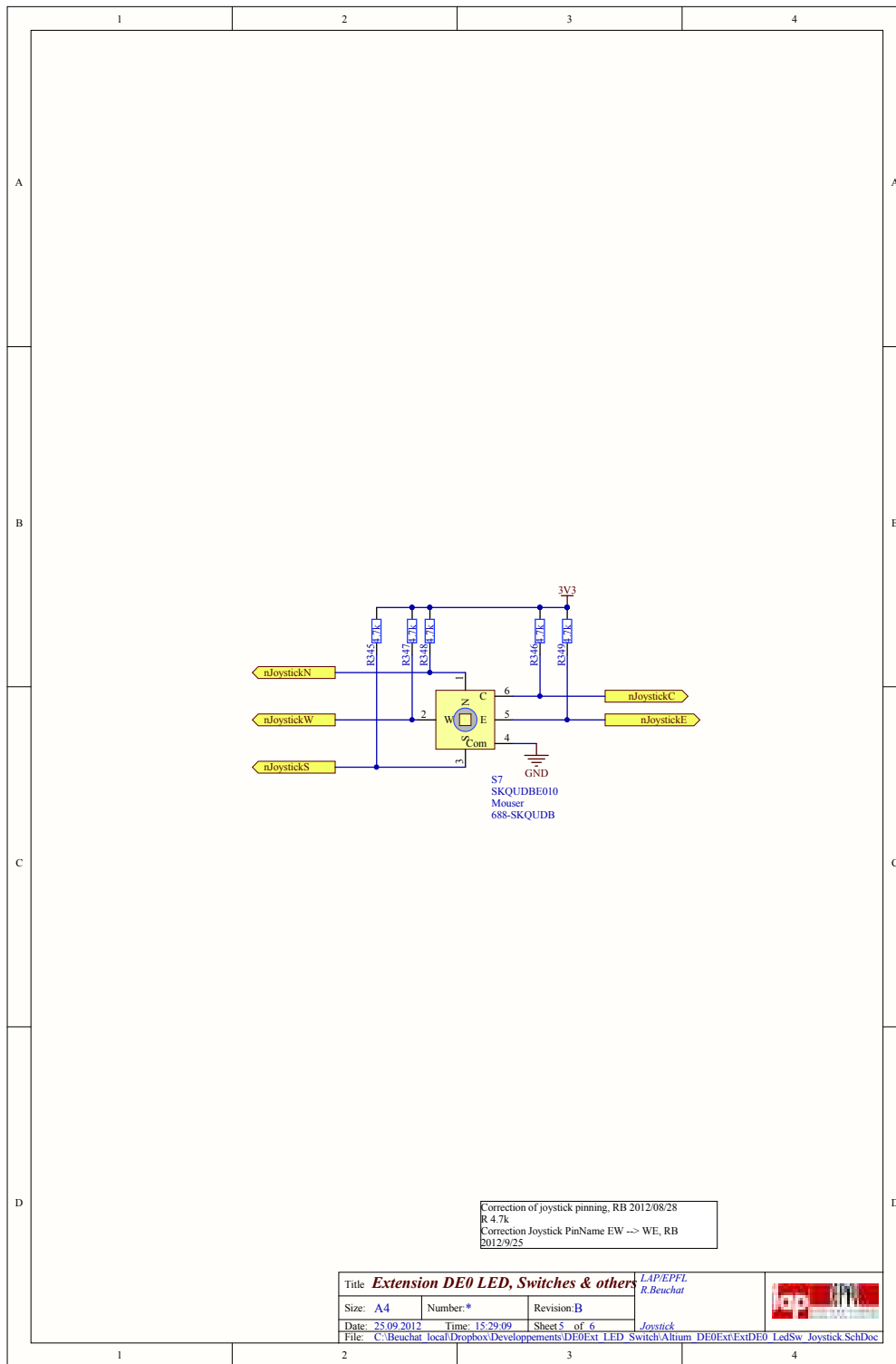
All the Row transistors have to be activated one at a time.  
With the selected Row/color, the Column to highlight have to be activated

A reset has to be done between each row access.

Changement PCB Footprint --> SSSMini3-F2-B pour tous les Tr  
Reset to replace lot of R  
R180 for Red  
R 68 for Blue  
R 56 for Green

FK3303010LCT-ND  
Digi-Key  
667-FK3303010L  
Mouser

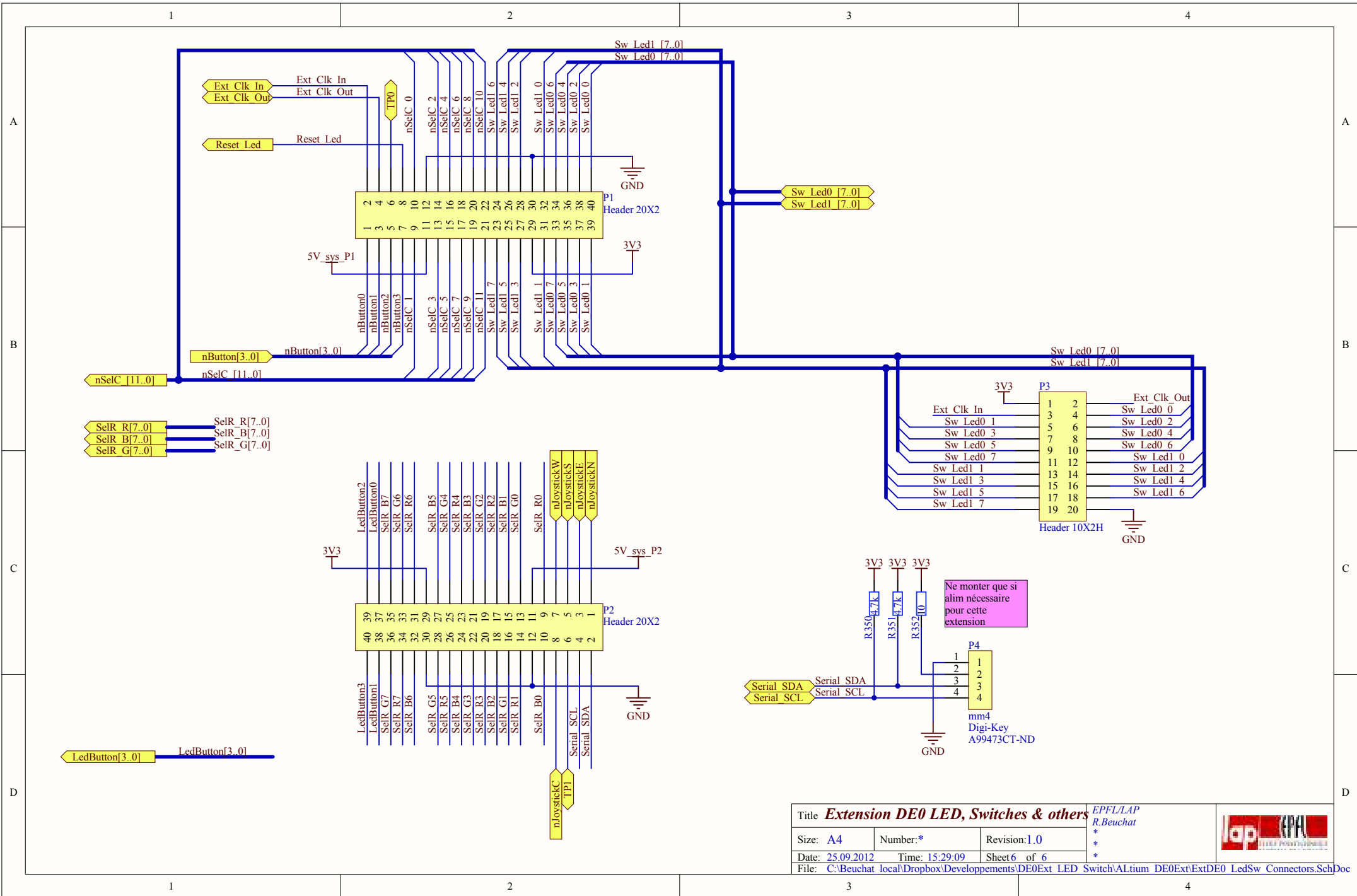
Title <b>Extension DE0 LED, Switches &amp; others</b>			EPFL/LAP R.Beuchat
Size: A3	Number: *	Revision: B.1	*
Date: 25.09.2012	Time: 15.29.09	Sheet 4 of 6	*
File: C:\Beuchat\local\Dropbox\Developpements\DE0Ext_LED_Switch\Altium_DE0Ext\ExtDE0_LedSw_LedsMatrix.SchDoc			



Correction of joystick pinning, RB 2012/08/28  
R 4.7k  
Correction Joystick PinName EW -> WE, RB  
2012/9/25

Title <b>Extension DE0 LED, Switches &amp; others</b>			LAPPEPFL R.Beuchat
Size: A4	Number: #	Revision: B	
Date: 25.09.2012	Time: 15:29:09	Sheet 5 of 6	Joystick
File: C:\Beuchat\local\Dropbox\Developpements\DE0Ext_LED_Switch\Alu\m DE0Ext\Ext\DE0_LedSw_Joystick.SchDoc			





Title **Extension DE0 LED, Switches & others**

EPFL/LAP  
R.Beuchat

Size: A4

Number:\*

Revision:1.0

Date: 25.09.2012

Time: 15:29:09

Sheet6 of 6

File: C:\Beuchat local\Dropbox\Developpements\DE0Ext\_LED\_Switch\Altium\_DE0Ext\ExtDE0\_LedSw\_Connectors.SchDoc



