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<a href="#">[KEMBALI KE MENU SEBELUMNYA]</a></div>
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padding: 10px; text-align: center; width: 330px;">
<b>DAFTAR ISI</b>
<br />
<div style="text-align: left;">
<a href="#kondisi">1. Jurnal</a></div>
<div style="text-align: left;">
<a href="#hardware">2. Alat dan Bahan</a></div>
<div style="text-align: left;">
<a href="#rangkaian">3. Rangkaian Simulasi</a></div>
<div style="text-align: left;">
<a href="#flowchart">4. Prinsip Kerja Rangkaian</a></div>
<div style="text-align: left;">
<a href="#listing">5. Video Rangkaian</a></div>
<div style="text-align: left;">
<a href="#video">6. Analisa</a></div>
<div style="text-align: left;">
<a href="#prinsip">7. Link Download</a><br />
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serif;"><span style="font-family: &quot;times&quot; , &quot;times new roman&quot; , serif; font-size:
small;"><b><br /></b></span></span></div>1. Jurnal</b>
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2. Alat dan Bahan

[Kembali]</div><div>
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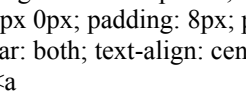
color: #222222; font-family: Arial, Tahoma, Helvetica, FreeSans, sans-serif; margin: 0px; padding: 0px; text-align: center;">Gambar 2. Modul De Lorenzo</div><div class="separator" style="border: 0px; box-sizing: border-box; clear: both; color: #222222; font-family: Arial, Tahoma, Helvetica, FreeSans, sans-serif; margin: 0px; padding: 0px; text-align: left;">b) Bahan</div><div class="separator" style="border: 0px; box-sizing: border-box; clear: both; color: #222222; font-family: Arial, Tahoma, Helvetica, FreeSans, sans-serif; margin: 0px; padding: 0px; text-align: left;"><ul style="text-align: left;">Switch (SW-SPDT)</div><div class="separator" style="border: 0px; box-sizing: border-box; clear: both; color: #222222; font-family: Arial, Tahoma, Helvetica, FreeSans, sans-serif; margin: 0px; padding: 0px; text-align: center;"></div><div class="separator" style="border: 0px; box-sizing: border-box; clear: both; color: #222222; font-family: Arial, Tahoma, Helvetica, FreeSans, sans-serif; margin: 0px; padding: 0px; text-align: left;"><ul style="text-align: left;">Power</div><div class="separator" style="border: 0px; box-sizing: border-box; clear: both; color: #222222; font-family: Arial, Tahoma, Helvetica, FreeSans, sans-serif; margin: 0px; padding: 0px; text-align: center;"></div><div class="separator" style="border: 0px; box-sizing: border-box; clear: both; color: #222222; font-family: Arial, Tahoma, Helvetica, FreeSans, sans-serif; margin: 0px; padding: 0px; text-align: center;">
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</div><div class="separator" style="clear: both; font-family: Arial, Tahoma, Helvetica, FreeSans, sans-serif; text-align: center;"></div><div class="separator" style="clear: both; font-family: Arial, Tahoma, Helvetica, FreeSans, sans-serif; text-align: center;">
</div><div class="separator" style="clear: both; font-family: Arial, Tahoma, Helvetica, FreeSans, sans-serif; text-align: center;"></div>
</div><div class="separator" style="clear: both; font-family: Arial, Tahoma, Helvetica, FreeSans, sans-serif; text-align: center;"></div>
</div><div class="separator" style="clear: both;">Gerbang AND ini memerlukan dua atau lebih input untuk menghasilkan satu output. Jika semua atau salah satu inputnya merupakan bilangan biner 0, maka outputnya akan menjadi 0. Sedangkan jika semua input adalah bilangan biner 1, maka outputnya akan menjadi 1.</div><div class="separator" style="clear: both; font-family: Arial, Tahoma, Helvetica, FreeSans, sans-serif;">"Source Sans Pro"; "Helvetica Neue"; Helvetica, Arial, sans-serif" style="color: #555555;">
</div><div style="font-family: Arial, Tahoma, Helvetica, FreeSans, sans-serif;"><ul style="line-height: 1.4; list-style-image: initial; list-style-position: initial; margin: 0.5em 0px; padding: 0px 2.5em;"><li style="border: none; margin: 0px 0px 0.25em; padding: 0.25em 0px;">Gerbang OR<div>
</div></div><div class="separator" style="clear: both; color: #444444; font-family: Arial, Tahoma, Helvetica, FreeSans, sans-serif; text-align: center;"><a href="https://blogger.googleusercontent.com/img/b/R29vZ2xl/AVvXsEg -vyUZYMHo5AB3-fb6w6liw6GEye

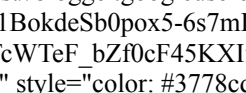
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</div><div class="separator" style="clear: both; color: #444444; font-family: Arial, Tahoma, Helvetica, FreeSans, sans-serif; text-align: center;"></div><br style="color: #444444; font-family: Arial, Tahoma, Helvetica, FreeSans, sans-serif;" /><div class="separator" style="clear: both; color: #444444; font-family: Arial, Tahoma, Helvetica, FreeSans, sans-serif; text-align: center;"></div><div style="color: #444444; font-family: Arial, Tahoma, Helvetica, FreeSans, sans-serif;">
</div>Sama seperti gerbang sebelumnya, gerbang ini juga memerlukan dua input untuk menghasilkan satu output. Gerbang OR ini akan menghasilkan output 1 jika semua atau salah satu input merupakan bilangan biner 1. Sedangkan output akan menghasilkan 0 jika semua inputnya adalah bilangan biner 0.<br style="color: #444444; font-family: Arial, Tahoma, Helvetica, FreeSans, sans-serif;" /><div style="color: #444444; font-family: Arial, Tahoma, Helvetica, FreeSans, sans-serif;"><div style="text-align: justify;">
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</div><div class="separator" style="clear: both; text-align: center;"></div><div class="separator" style="clear: both; text-align: center;">
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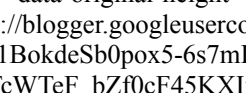
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</div>Gerbang XOR ini memerlukan dua input untuk menghasilkan satu output. Jika input berbeda (misalkan: input A=1, input B=0) maka output yang dihasilkan adalah bilangan biner 1. Sedangkan jika input adalah sama maka akan menghasilkan output dengan bilangan biner 0.</div><div style="widows: 1;">
</div><div style="widows: 1;"><ul style="list-style-type: none; list-style-position: initial; margin: 0.5em 0px; padding: 0px 2.5em;"><li style="border: none; margin: 0px 0px 0.25em; padding: 0.25em 0px;">Gerbang XNOR</div>
</div><div class="separator" style="clear: both; text-align: center;"></div><div class="separator" style="clear: both; text-align: center;">
</div><div class="separator" style="clear: both; text-align: center;"></div>
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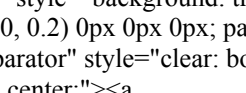
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</div><div style="widows: 1;"><div style="font-family: arial;">Gerbang logika XNOR adalah gabungan dari gerbang logika XOR dan gerbang logika NOT. Dari gabungan logika tersebut, maka disingkat menjadi XNOR atau <i style="box-sizing: border-box; font-family: Karla; text-align: start; widows: 2;">Exclusive </i>NOR. Gerbang logika XNOR dapat ditemukan pada komponen elektronika IC 7266.</div><div style="font-family: arial;">
</div><div style="font-family: arial;">Tabel kebenaran gerbang logika XNOR menjelaskan bahwa masukan yang sama akan menghasilkan keluaran angka "1". Sedangkan, masukan yang berbeda akan menghasilkan keluaran berupa angka "0". Jadi, bisa dikatakan bahwa tabel kebenaran XNOR kebalikan dari tabel XOR.</div></div><div style="widows: 1;">
</div><div style="widows: 1;"><ul style="line-height: 1.4; list-style-image: initial; list-style-position: initial; margin: 0.5em 0px; padding: 0px 2.5em;"><li style="border: none; margin: 0px 0px 0.25em; padding: 0.25em 0px;">Gerbang NOT<div style="text-align: start; widows: 2;">
</div><div style="text-align: start; widows: 2;"><div class="separator" style="clear: both; text-align: center;"></div><div class="separator" style="clear: both; text-align: center;">
</div><div class="separator" style="clear: both; text-align: center;"></div>
</div><div class="separator" style="clear: both; text-align: center;"></div><div>
</div>Gerbang logika NOT adalah gerbang logika yang bisa melakukan operasi peniadaan logika atau pembalik keadaan logika. Karena hal itulah, maka gerbang logika ini dinamakan gerbang logika NOT. Gerbang logika NOT juga dikenal sebagai rangkaian inverter. Gerbang logika NOT bisa ditemukan pada komponen listrik IC 7404.</div><div style="text-align: start; widows: 2;"><span style="font-family:

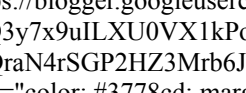
</div><div style="text-align: start; widows: 2;">Tabel kebenaran gerbang logika NOT menggambarkan bahwa masukan berupa angka "0" akan menghasilkan keluaran berupa angka "1" dan jika masukan berupa angka "1" akan menghasilkan keluaran angka "1".</div><div style="text-align: start; widows: 2;"><ul style="list-style-type: none; margin: 0px 0px 0.25em 0.25em; padding: 0.25em 0px;"><li style="border: none; margin: 0px 0px 0.25em 0.25em; padding: 0.25em 0px;">Gerbang NAND<div>
</div><div><div class="separator" style="clear: both; text-align: center;"></div><div class="separator" style="clear: both; text-align: center;">
</div><div class="separator" style="clear: both; text-align: center;"></div>
<div class="separator" style="clear: both; text-align: center;"></div></div><div><div class="separator" style="clear: both; text-align: center;">
</div><div class="separator" style="clear: both;">Gerbang logika NAND adalah gabungan dari gerbang logika AND dan gerbang logika NOT. Dari kedua gabungan logika itu, maka dapat menjadi NOT AND atau bisa disingkat menjadi NAND. Gerbang logika NAND dapat ditemukan pada komponen elektronika IC 7400.</div><div class="separator" style="clear: both;">
</div><div class="separator" style="clear: both;">Tabel kebenaran gerbang logika NAND menjelaskan bahwa masukan berupa angka "1" dengan angka "1" akan menghasilkan keluaran angka "0". Sedangkan masukan angka "0" dengan angka "0" akan menghasilkan keluaran angka "1".</div><div class="separator" style="clear: both;">
</div><div class="separator" style="clear: both;"><ul style="list-style-type: none; margin: 0.5em 0px; padding: 0px 2.5em;"><li style="border: none; margin: 0px 0px 0.25em 0.25em; padding: 0.25em 0px;">Gerbang NOR<div>
</div><div><div class="separator" style="clear: both; text-align: center;"></div><div class="separator" style="clear: both; text-align: center;">
</div><div class="separator" style="clear: both; text-align: center;"></div><div class="separator" style="clear: both; text-align: center;">
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 data-original-height="304" data-original-width="615" height="159" src="https://blogger.googleusercontent.com/img/b/R29vZ2xl/AVvXsEgKwU_L4gEOK2JCAG0eetxyHph_saXcxRuaiPkQ3y7x9uLLXU0VX1kPonY8NNsoppU4F4864IDoCZVpEL2CDGrbBTJEqebDEuxVEFqX8z0vVJcTiVsRkG6QraN4rSGP2HZ3Mr6JI21hKIidc69owUo6cglJNHZ8af9B5zbPLjSX8U3r2dkcss8AHHO/s320/rumus.png" style="background: transparent; border-radius: 0px; border: 1px solid transparent; box-shadow: rgba(0, 0, 0, 0.2) 0px 0px 0px; padding: 8px; position: relative;" width="320"/>

Gerbang logika NOR adalah gerbang logika gabungan dari gerbang logika OR dan gerbang logika NOT. Gerbang logika NOR bisa kamu temukan pada komponen listrik yang bernama IC 7436.

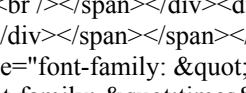
Berdasarkan tabel kebenaran di atas gerbang logika NOR memiliki dua masukan dan satu keluaran. Masukan yang berupa angka “0” bertemu dengan angka “0” akan menghasilkan angka “1”. Sedangkan angka “1” bertemu dengan angka “1” akan menghasilkan keluaran angka

0	0	1
0	1	0
1	0	0
1	1	0

Rangkaian Simulasi

Kembali

Untuk B0 dan B1

 data-original-height="180" data-original-width="320" style="width: 320px; height: 180px;"/>

Screenshot of a logic simulator showing a NOR gate circuit. The inputs are labeled B0 and B1, and the output is labeled Y. The truth table from the previous section is displayed above the circuit.

[illegible]

