

<p> </p><h3 class="post-title entry-title" itemprop="name" style="background-color: white; font-family: Georgia, Utopia, "Palatino Linotype", Palatino, serif; font-feature-settings: normal; font-kerning: auto; font-optical-sizing: auto; font-size: 24px; font-stretch: normal; font-variant-alternates: normal; font-variant-east-asian: normal; font-variant-numeric: normal; font-variation-settings: normal; font-weight: normal; line-height: normal; margin: 0.75em 0px 0px; position: relative;">Laporan Akhir 1</h3><div class="post-header" style="background-color: white; font-family: Georgia, Utopia, "Palatino Linotype", Palatino, serif; font-size: 12.6px; line-height: 1.6; margin: 0px 0px 1.5em;"><div class="post-header-line-1"></div><div class="post-body entry-content" id="post-body-7749188342890784452" itemprop="description articleBody" style="background-color: white; font-family: Georgia, Utopia, "Palatino Linotype", Palatino, serif; font-size: 15.4px; line-height: 1.4; position: relative; width: 813px;">
<div style="text-align: center;">[KEMBALI KE MENU SEBELUMNYA]</div>
<center><div style="border: 2px dashed rgb(23, 128, 221); height: 240px; overflow: auto; padding: 10px; width: 330px;">DAFTAR ISI
<div style="text-align: left;">1. Jurnal</div><div style="text-align: left;">2. Alat dan Bahan</div><div style="text-align: left;">3. Rangkaian Simulasi</div><div style="text-align: left;">4. Prinsip Kerja Rangkaian</div><div style="text-align: left;">5. Video Rangkaian</div><div style="text-align: left;">6. Analisa</div><div style="text-align: left;">7. Link Download
</div></center><div>
</div>1. Jurnal [Kembali]<div><div class="separator" style="clear: both; text-align: center;"></div>
<div class="separator" style="clear: both; text-align: center;">
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style="clear: both; text-align: center; "><div class="separator" style="clear: both; ">
</div></div></div><div><div>2. Alat dan Bahan [Kembali]</div><div class="separator" style="clear: both; text-align: center; "></div><div><li style="margin: 0px 0px 0.25em; padding: 0px; ">Panel DL 2203C <li style="margin: 0px 0px 0.25em; padding: 0px; ">Panel DL 2203D <li style="margin: 0px 0px 0.25em; padding: 0px; ">Panel DL 2203S <li style="margin: 0px 0px 0.25em; padding: 0px; ">Jumper</div><div class="separator" style="border: 0px; box-sizing: border-box; clear: both; font-family: times, "times new roman", serif; margin: 0px; padding: 0px; text-align: center; "></div></div><div><h3 class="post-title entry-title" itemprop="name" style="color: #4e4e4e; font-family: Arial, Tahoma, Helvetica, FreeSans, sans-serif; font-feature-settings: normal; font-kerning: auto; font-optical-sizing: auto; font-size: 22px; font-stretch: normal; font-variant-alternates: normal; font-variant-east-asian: normal; font-variant-numeric: normal; font-variation-settings: normal; font-weight: normal; line-height: normal; margin: 0.75em 0px 0px; position: relative; ">
</h3><div class="post-body entry-content" id="post-body-8796932301002023946" itemprop="description articleBody"

style="color: #4e4e4e; font-family: "Times New Roman";, Times, FreeSerif, serif; font-size: 13.2px; line-height: 1.4; position: relative; width: 570px;"><div style="font-size: medium;">
</div></div><div><div><div style="color: #505050;"><div style="text-align: justify;">5) IC XOR 4030</div><table cellpadding="0" cellspacing="0" class="tr-caption-container" style="background-attachment: initial; background-clip: initial; background-image: initial; background-origin: initial; background-position: initial; background-repeat: initial; background-size: initial; border: 1px solid rgb(241, 241, 241); box-shadow: rgba(0, 0, 0, 0.1) 1px 1px 5px; color: #222222; font-weight: bold; margin-bottom: 0.5em; margin-left: auto; margin-right: auto; padding: 5px; position: relative; text-align: center;"><tbody><tr><td></td></tr><tr><td class="tr-caption" style="font-size: 12.8px;"><div>
</div><div style="text-align: justify;">Spesifikasi:</div><ul style="line-height: 1.4; margin: 0.5em 0px; padding: 0px 2.5em; text-align: start;"><li style="margin: 0px 0px 0.25em; padding: 0px;">Logic IC Type: XOR GATE<li style="margin: 0px 0px 0.25em; padding: 0px;">Sub Category: Gates<li style="margin: 0px 0px 0.25em; padding: 0px;">Load Capacitance (CL): 15.0 pF<li style="margin: 0px 0px 0.25em; padding: 0px;">Number of Terminals: 14<li style="margin: 0px 0px 0.25em; padding: 0px;">Operating Temperature-Min: -40.0 Cel<li style="margin: 0px 0px 0.25em; padding: 0px;">Operating Temperature-Max: 85.0 Cel<li style="margin: 0px 0px 0.25em; padding: 0px;">Package Body Material: PLASTIC/EPOXY<li style="margin: 0px 0px 0.25em; padding: 0px;">Package Code: DIP<li style="margin: 0px 0px 0.25em; padding: 0px;">Power Supplies (V): 3/15<li style="margin: 0px 0px 0.25em; padding: 0px;">Prop. Delay@Nom-Sup: 300.0 ns<li style="margin: 0px 0px 0.25em; padding: 0px;">Schmitt Trigger: NO<li style="margin: 0px 0px 0.25em; padding: 0px;">Technology: CMOS<li style="margin: 0px 0px 0.25em; padding: 0px;">Temperature Grade: INDUSTRIAL<li style="margin: 0px 0px 0.25em; padding: 0px;">CLASS: CMOS / CLEAR</td></tr></tbody></table>
</div><div style="color: #505050;">
</div><div style="color: #505050;">6) IC AND 4073</div></div>

style="color: #222222;"><table align="center" cellpadding="0" cellspacing="0" class="tr-caption-container" style="background-attachment: initial; background-clip: initial; background-image: initial; background-origin: initial; background-position: initial; background-repeat: initial; background-size: initial; border: 1px solid rgb(241, 241, 241); box-shadow: rgba(0, 0, 0, 0.1) 1px 1px 5px; color: #222222; font-weight: bold; margin-bottom: 0.5em; margin-left: auto; margin-right: auto; padding: 5px; position: relative;"><tbody><tr><td style="text-align: center;"></td><tr><td class="tr-caption" style="font-size: 12.8px; text-align: center;"><div style="text-align: justify;">Spesifikasi :</div><table border="1" cellpadding="2" cellspacing="1" style="border-collapse: inherit; border-spacing: 0px; border-width: 0px; color: #233851; margin-bottom: 0px;"><tbody style="box-sizing: border-box;"><tr style="box-sizing: border-box;"><td style="border-bottom: 0px solid rgb(221, 221, 221) !important; border-color: rgb(221, 221, 221); border-left: 0px solid rgb(221, 221, 221) !important; border-right-color: rgb(221, 221, 221) !important; border-right-style: solid !important; border-right-width: 0px; border-style: solid; border-top: 1px solid rgb(221, 221, 221) !important; border-width: 1px 0px 0px; box-sizing: border-box; padding: 10px 15px;">Integrated Circuits (ICs)</td><tr><tr style="box-sizing: border-box;"><th style="border-left-width: 0px; box-sizing: border-box; padding: 0px; text-align: left;">Name</th><td style="border-bottom: 0px solid rgb(221, 221, 221) !important; border-color: rgb(221, 221, 221); border-left: 0px solid rgb(221, 221, 221) !important; border-right-color: rgb(221, 221, 221) !important; border-right-style: solid !important; border-right-width: 0px; border-style: solid; border-top: 1px solid rgb(221, 221, 221) !important; border-width: 1px 0px 0px; box-sizing: border-box; padding: 10px 15px;">CD4073 Triple 3-Input AND Gate</td><tr><tr style="box-sizing: border-box;"><th style="border-left-width: 0px; box-sizing: border-box; padding: 0px; text-align: left;">Family</th><td style="border-bottom: 0px solid rgb(221, 221, 221) !important; border-color: rgb(221, 221, 221); border-left: 0px solid rgb(221, 221, 221) !important; border-right-color: rgb(221, 221, 221) !important; border-right-style: solid !important; border-right-width: 0px; border-style: solid; border-top: 1px solid rgb(221, 221, 221) !important; border-width: 1px 0px 0px; box-sizing: border-box; padding: 10px 15px;">Logic</td><tr><tr style="box-sizing: border-box;"><th

style="border-left-width: 0px; box-sizing: border-box; padding: 0px; text-align: left;">Series</th><td style="border-bottom: 0px solid rgb(221, 221, 221) !important; border-color: rgb(221, 221, 221); border-left: 0px solid rgb(221, 221, 221) !important; border-right-color: rgb(221, 221, 221) !important; border-right-style: solid !important; border-right-width: 0px; border-style: solid; border-top: 1px solid rgb(221, 221, 221) !important; border-width: 1px 0px 0px; box-sizing: border-box; padding: 10px 15px;">4000</td></tr><tr style="box-sizing: border-box;"><th style="border-left-width: 0px; box-sizing: border-box; padding: 0px; text-align: left;">Logic Type</th><td style="border-bottom: 0px solid rgb(221, 221, 221) !important; border-color: rgb(221, 221, 221); border-left: 0px solid rgb(221, 221, 221) !important; border-right-color: rgb(221, 221, 221) !important; border-right-style: solid !important; border-right-width: 0px; border-style: solid; border-top: 1px solid rgb(221, 221, 221) !important; border-width: 1px 0px 0px; box-sizing: border-box; padding: 10px 15px;">Combinatorial</td></tr><tr style="box-sizing: border-box;"><th style="border-left-width: 0px; box-sizing: border-box; padding: 0px; text-align: left;">Mounting Type</th><td style="border-bottom: 0px solid rgb(221, 221, 221) !important; border-color: rgb(221, 221, 221); border-left: 0px solid rgb(221, 221, 221) !important; border-right-color: rgb(221, 221, 221) !important; border-right-style: solid !important; border-right-width: 0px; border-style: solid; border-top: 1px solid rgb(221, 221, 221) !important; border-width: 1px 0px 0px; box-sizing: border-box; padding: 10px 15px;">Surface Mount</td></tr><tr style="box-sizing: border-box;"><th style="border-bottom-width: 0px; border-left-width: 0px; box-sizing: border-box; padding: 0px; text-align: left;">No. of Pins</th><td style="background: rgb(225, 238, 250); border-bottom-width: 0px; border-color: rgb(221, 221, 221); border-left-width: 0px !important; border-right-width: 0px; border-style: solid; border-top-width: 1px !important; border-width: 1px 0px 0px; box-sizing: border-box; padding: 10px 15px;">14</td></tr></tbody></table></td></tr></tbody></table>
<b style="color: #505050;">
</div><div class="separator" style="clear: both;">7) IC 4071 OR</div><table align="center" cellpadding="0" cellspacing="0" class="tr-caption-container" style="background-attachment: initial; background-clip: initial; background-image: initial; background-origin: initial; background-position: initial; background-repeat: initial; background-size: initial; border: 1px solid rgb(241, 241, 241); box-shadow: rgba(0, 0, 0, 0.1) 1px 1px 5px; color: #222222; margin-bottom: 0.5em; margin-left: auto; margin-right: auto; padding: 5px; position: relative;"><tbody><tr><td style="text-align: center;"><a href="https://blogger.googleusercontent.com/img/b/R29vZ2xl/AVvXsEgWMxXJ8SQZ5su4zOdquC9gsxN4apBJaMJf-B1OHxy6w9xJiLjewqov8EaEI_96eVIRbKRpEwuNCRiKw9ZlwqEGYZysGAJjsgXpJ71R1xtRw rHiztHktWwCxpjhgdZjVVEfE3W6va1noivcHNbzxoAKX2Zy5iTpnpq0OIGc6PKqg_UOyhG24KKt81Y0/s600/ic4071.jpg" style="color: #cf3b26; margin-left: auto; margin-right: auto; text-decoration-line:

none;"></td></tr><tr><td class="tr-caption" style="font-size: 12.8px; text-align: center;"><div style="text-align: justify;">Spesifikasi :</div><ul style="color: #202122; line-height: 1.4; list-style-image: url("/w/skins/Vector/resources/common/images/bullet-icon.svg?d4515"); margin: 0.3em 0px 0px 1.6em; padding: 0px; text-align: start;"><li style="margin: 0px 0px 0.1em; padding: 0px;">Pin 7 is the negative supply<li style="margin: 0px 0px 0.1em; padding: 0px;">Pin 14 is the positive supply<li style="margin: 0px 0px 0.1em; padding: 0px;">Pins 1&2, 5&6, 8&9, 12&13 are gate inputs<li style="margin: 0px 0px 0.1em; padding: 0px;">Pins 3, 4, 10, 11 are gate outputs</td></tr></tbody></table>
<div class="separator" style="clear: both;">8) Logicprobe atau LED</div><div class="separator" style="border: 0px; box-sizing: border-box; clear: both; margin: 0px; padding: 0px;"><div class="separator" style="border: 0px; box-sizing: border-box; clear: both; margin: 0px; padding: 0px;"><div class="separator" style="border: 0px; box-sizing: border-box; clear: both; margin: 0px; padding: 0px;"><div class="separator" style="border: 0px; box-sizing: border-box; clear: both; color: #505050; font-weight: bold; margin: 0px; padding: 0px; text-align: center;"></div><div class="separator" style="border: 0px; box-sizing: border-box; clear: both; margin: 0px; padding: 0px; text-align: center;">
</div><div class="separator" style="border: 0px; box-sizing: border-box; clear: both; margin: 0px; padding: 0px; text-align: justify;"><div class="separator" style="border: 0px; box-sizing: border-box; clear: both; margin: 0px; padding: 0px;">9) Power DC</div><div class="separator" style="border: 0px; box-sizing: border-box; clear: both; margin: 0px; padding: 0px;"><br style="box-sizing: border-box;" /></div><div class="separator" style="border: 0px; box-sizing: border-box; clear: both; margin: 0px; padding: 0px;"><div class="separator" style="border: 0px; box-sizing: border-box; clear: both; margin: 0px; padding: 0px; text-align: center;"><a href="https://blogger.googleusercontent.com/img/b/R29vZ2xl/AVvXsEiifCpql-hK4HMFsTtWx-k63-lZK

bRxgl5nzCc7JeiAalMiPGMBKUN_FYR-WP1ziACvUliQsf8WaWffO0ZPi5mtkodnnow-Dg8joTApnKVGjYpwl3OR5FT1pmPMf3rBeiZxVy1qVEbmQQGg_1R3Jfc2FHjrwFwjN7l_UmWBGifWrwIKEJHtUu5wHwSn/s192/image_2022-03-23_125741.png" style="border: 0px; box-sizing: border-box; color: #597e00; margin: 0px 1em; padding: 0px; text-decoration-line: none; transition: all 0.3s ease 0s;"></div><div class="separator" style="border: 0px; box-sizing: border-box; clear: both; margin: 0px; padding: 0px; text-align: center;">
</div><div class="separator" style="border: 0px; box-sizing: border-box; clear: both; margin: 0px; padding: 0px; text-align: center;"><br style="box-sizing: border-box;" /></div><div class="separator" style="border: 0px; box-sizing: border-box; clear: both; margin: 0px; padding: 0px;">10) Switch (SW-SPDT)</div><div class="separator" style="border: 0px; box-sizing: border-box; clear: both; margin: 0px; padding: 0px;"><br style="box-sizing: border-box;" /></div><div class="separator" style="border: 0px; box-sizing: border-box; clear: both; font-family: Arial, Tahoma, Helvetica, FreeSans, sans-serif; margin: 0px; padding: 0px; text-align: center;"></div></div></div></div></div></div></div></div></div></div></div></div><div>
</div><div>
</div><div>3. Rangkaian Simulasi [Kembali]</div><div>
</div><div><div class="separator" style="clear: both; text-align: center;"><a

[illegible]

apabila semua input yang diberikan ke gerbang logika OR seluruhnya adalah berlogika nol , namun jika terdapat salah satu input yang berlogika 1 maka nilai keluaran dari gerbang logika OR akan berlogika 1. Pada percobaan yang telah dilakukan kaki gerbang OR terhubung ke output dari gerbang logika XOR dan AND , yang masing-masing gerbang berlogika 0. Sehingga secara keseluruhan , rangkaian pada percobaan kali ini akan dihasilkan berlogika 0

5. Video Rangkaian [\[Kembali\]](https://febry212030.blogspot.com/p/modul-1.html)

6. Analisa

Analisa hasil output H1 dan H2 , kenapa bisa sama

Hasil output H1 dan H2 bisa sama karena pada kedua rangkaian menggunakan 4 gerbang logika yang sama , yaitu XOR,AND, NOT, dan OR dan juga memiliki kondisi yang sama

Pada gerbang logika XOR, dimana kaki-kaki XOR terhubung ke B dan D yang sama sama berlogika 1. Pada gerbang XOR, berlaku prinsip penjumlahan . Apabila input dijumlahkan hasilnya genap, maka output XOR akan bernilai 0, begitu juga dengan sebaliknya, apabila penjumlahan input ganjil, maka output XOR akan bernilai 1.

Karena kedua rangkaian memiliki input yang sama (B=1 D=), maka output dari gerbang logika XOR adalah 0

Pada gerbang logika AND, dimana kaki-kaki AND terhubung KE A=1, C` =1, D=1 ( untuk rangkaian pertama) dan A=1, B=1 , C` =1 (untuk rangkaian kedua). Dimana pada gerbang logika AND berlaku prinsip perkalian. Secara umum apabila terdapat salah satu input dari AND yang bernilai 0, maka output yang dihasilkan akan bernilai 0. Pada kedua rangkaian terdapat salah satu input yang bernilai 0 yaitu C` , yang sebelumnya bernilai 1 tetapi setelah di NOT kan nantinya C akan bernilai 0. Karena nilai C bernilai 0, maka output dari gerbang logika AND akan bernilai 0

Pada gerbang logika OR, dimana kaki-kaki OR terhubung ke output dari XOR dan AND, yang masing-masing bernilai 0. Dimana pada gerbang logika OR berlaku prinsip penjumlahan . Nilai output hanya bernilai 0 pada saat seluruh input dari OR bernilai 0, dan jika salah satu input OR bernilai 1 maka output bernilai 1.

Jadi secara keseluruhan rangkaian H1 dan H2 merupakan rangkaian yang sejenis, hanya saja terdapat sedikit perbedaan pada input yang diberikan

small;">7. Link Download [Kembali]
</div></div><div>Link HTML DISINI</div><div>Link Video DISINI</div><div>Link Rangkaian DISINI</div><div><div style="color: #222222; font-family: Arial, Tahoma, Helvetica, FreeSans, sans-serif; font-size: medium;">Download Datasheet XOR 4030 klik disini</div><div style="color: #222222; font-family: Arial, Tahoma, Helvetica, FreeSans, sans-serif; font-size: medium;">Download Datasheet NOT klik disini</div><div style="color: #222222; font-family: Arial, Tahoma, Helvetica, FreeSans, sans-serif; font-size: medium;">Download Datasheet OR 4071 klik disini</div><div style="color: #222222; font-family: Arial, Tahoma, Helvetica, FreeSans, sans-serif; font-size: medium;">Download Datasheet AND 4073 klik disini</div><div style="color: #222222; font-family: Arial, Tahoma, Helvetica, FreeSans, sans-serif; font-size: medium;">Download Datasheet LED klik disini</div><div style="color: #222222; font-family: Arial, Tahoma, Helvetica, FreeSans, sans-serif; font-size: medium;">Download Datasheet Resistor klik disini</div><div style="color: #222222; font-family: Arial, Tahoma, Helvetica, FreeSans, sans-serif; font-size: medium;">Download Datasheet Switch klik disini</div></div></div>