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position: relative;">Laporan Akhir 1 (Percobaan 1)</h3><div><br /></div><div><br /></div>
<div style="text-align: center;">
<a href="#">[KEMBALI KE MENU SEBELUMNYA]</a></div>
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auto; 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 />
</div>
</div>
</center>
<span style="font-family: &quot;times&quot;, &quot;times new roman&quot;, serif;"><span
style="font-family: &quot;times&quot;, &quot;times new roman&quot;, serif; font-size:
small;"><b><div><span style="font-family: &quot;times&quot;, &quot;times new roman&quot;, serif;"><span style="font-family: &quot;times&quot;, &quot;times new roman&quot;, serif; font-size:
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<a name="kondisi"></a>
<a href="#home">[Kembali]</a></span></span><div><span style="font-family: times, times new
roman, serif;"><br /></span></div><div><div class="separator" style="clear: both; text-align:
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small;"><b>2. Alat dan Bahan</b>
<a name="hardware"></a>

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[\[Kembali\]](#home)

2.1 Alat

a..

Gambar 1. Jumper

<br style="box-sizing: border-box;" />

Gambar 2. Modul De Lorenzo

<br style="box-sizing: border-box;" />

2.2 Bahan (proteus) [kembali]</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;">a. IC 74LS112 (J-K Flip-Flop)</div><div style="border: 0px; box-sizing: border-box; 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; 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;">b. CD4013B (D Flip-Flop)</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;"></div><br style="box-sizing: border-box;" /><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;"><br style="box-sizing: border-box;" />c. <span lang="EN-US" style="border: 0px; box-sizing:

border-box; line-height: 18.12px; margin: 0px; padding: 0px; text-indent: -18pt;">>Gerbang AND (IC 7048)</div><div class="separator" style="border: 0px; box-sizing: border-box; clear: both; margin: 0px; padding: 0px; text-align: center;"></div><br style="box-sizing: border-box;" /><div class="separator" style="border: 0px; box-sizing: border-box; clear: both; margin: 0px; padding: 0px;">d. Gerbang OR (IC 7432)</div><div class="separator" style="border: 0px; box-sizing: border-box; clear: both; margin: 0px; padding: 0px; text-align: center;"></div><br style="box-sizing: border-box;" /><div class="separator" style="border: 0px; box-sizing: border-box; clear: both; margin: 0px; padding: 0px;"><br style="box-sizing: border-box;" /></div><br style="box-sizing: border-box;" /><p class="MsoNormal" style="border: 0px; box-sizing: border-box; margin: 0cm 0cm 0cm 18pt; padding: 0px;"><br style="box-sizing: border-box;" /></p><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;"><br style="box-sizing: border-box;" /></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;"><br style="box-sizing: border-box;" /></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:

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margin: 0px; padding: 0px; text-align: center;">Gambar 6. Power
DC</div><div class="separator" style="border: 0px; box-sizing: border-box; clear: both;
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style="box-sizing: border-box;" /></div><div class="separator" style="border: 0px; box-sizing:
border-box; clear: both; margin: 0px; padding: 0px;">f. 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;"
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helvetica; font-size: small;"></div><div class="separator" style="border: 0px; box-sizing: border-box; clear: both;
margin: 0px; padding: 0px; text-align: center;">Gambar 7.
Switch</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:
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helvetica;"><br style="box-sizing: border-box;" /></div><div class="separator" style="border:
0px; box-sizing: border-box; clear: both; margin: 0px; padding: 0px;"><span style="font-family:
helvetica;">g. Logicprobe atau LED</div><div class="separator" style="border: 0px; box-sizing:
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Probe</div><div class="separator" style="border: 0px; box-sizing: border-box; clear: both;
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style="font-family: "times";, "times new roman";, serif; font-size:
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[Kembali]</div><div><span style="font-family: times, times
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<span
style="font-family: "times";, "times new roman";, serif; font-size:
small;">4. Prinsip Kerja Rangkaian

[Kembali]</div><div><div style="background-color:
white;"><div style="text-align: justify;">Pada percobaan 1
diminta untuk membuat rangkaian seperti yang ada pada modul, yang mana dibuat rangkaian shift
register menggunakan JK flip-flop.</div><div style="text-align: justify;"><span
style="font-family: helvetica;">
</div><div style="text-align: justify;"><span
style="font-family: helvetica;">Input clock pada tiap-tiap flip-flop berasal dari B0-B6 yang mana
nantinya nilainya akan divariasikan sesuai 4 kondisi yang ada di jurnal yaitu SISO, SIPO, PISO,
PIPO.</div></div><div style="background-color: white; text-align: justify;"><span
style="font-family: helvetica;">Yang mana:</div><div style="background-color: white;
text-align: justify;">- SISO, ditandai
dengan output keluaran yang satu per satu dan juga masukan satu persatu.</div><div
style="background-color: white; text-align: justify;"><span
style="text-align: left;"> <span style="background-color: transparent; text-align:
left;">SIPO, ditandai dengan input masukan yang satu per satu dan juga keluaran secara
paralel/serempak.</div><div style="background-color: white; text-align:
justify;"><span style="background-color: transparent; text-align:
left;"> PIPO, ditandai
dengan output keluaran secara paralel dan juga masukan secara paralel.</div><div
style="background-color: white; text-align: justify;"><span
style="background-color: transparent; text-align: left;"> <span
style="background-color: transparent; text-align: left;">PIPO, ditandai dengan output keluaran secara
paralel dan juga masukan secara paralel.</div><div style="background-color: white;
text-align: justify;"><span style="background-color: transparent;
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5. Video Rangkaian</div><div>
</div><div class="separator" style="clear: both; text-align: center;"><iframe allowfullscreen="" class="BLOG_video_class" height="266" src="https://www.youtube.com/embed/vpl9pw7hLdg" width="320" youtube-src-id="vpl9pw7hLdg"></iframe></div>

6. Analisa </div><div><p class="MsoNormal" style="background: 0px 0px rgb(255, 255, 255); border: 0px; line-height: 24px; outline: 0px; padding: 0px; vertical-align: baseline;">PERCOBAAN 1</p><p class="MsoNormal" style="background: 0px 0px rgb(255, 255, 255); border: 0px; line-height: 24px; outline: 0px; padding: 0px; vertical-align: baseline;"><b style="background: 0px 0px; border: 0px; outline: 0px; padding: 0px; vertical-align: baseline;">1. Analisa output yang dihasilkan tiap-tiap kondisi</p><p class="MsoNormal" style="background: 0px 0px rgb(255, 255, 255); border: 0px; line-height: 24px; outline: 0px; padding: 0px; text-align: justify; vertical-align: baseline;">Pada kondisi 1, data diinputkan pada 1 jalur yaitu pin B1. Output kondisi ini berupa pergeseran data secara bergantian, artinya output juga satu jalur. Hal ini menunjukkan prinsip SISO dimana input dan output sama-sama satu jalur</p><p class="MsoNormal" style="background: 0px 0px rgb(255, 255, 255); border: 0px; line-height: 24px; outline: 0px; padding: 0px; text-align: justify; vertical-align: baseline;">Pada kondisi 2, data masuk juga melalui satu jalur (sama seperti kondisi 1) sementara keluar secara bersamaan (dalam 4 jalur). Kondisi ini menunjukkan konsep SIPO yaitu input satu jalur menghasilkan output bersamaan.</p><p class="MsoNormal" style="background: 0px 0px rgb(255, 255, 255); border: 0px; line-height: 24px; outline: 0px; padding: 0px; text-align: justify; vertical-align: baseline;">Pada kondisi 3 data merupakan variasi nilai B3-B6, artinya data input masuk bersamaan (paralel) namun dihasilkan output yang bergeser satu persatu dalam satu jalur. Hal ini menunjukkan prinsip PISO yaitu input paralel menghasilkan data satu jalur.</p><p class="MsoNormal" style="background: 0px 0px rgb(255, 255, 255); border: 0px; line-height: 24px; outline: 0px; padding: 0px; text-align: justify; vertical-align: baseline;">Sementara itu pada kondisi 4 data input merupakan variasi nilai B3-B6 (sama seperti kondisi 3) yaitu masuk secara bersamaan. Output kondisi ini juga berupa nilai yang muncul secara bersamaan (dalam beberapa output). Hal tersebut menunjukkan sifat shift register jenis PIPO (paralel in-paralel out). </p>7. Link Download</div><div>[Kembali]</div>
</div></div><div>Download HTML</div><div><div style="background-color: white; color: #222222;">Download Rangkaian</div><div style="background-color: white; color: #222222;">Download Video</div><div style="background-color: white; color: #222222;">Download datasheet SPTD</div></div></div>

[Download datasheet 74LS112](https://drive.google.com/uc?export=download&id=1ZY_AdtSWalyKeliec9_87Ltv2qOwiGnz)

[Download datasheet 7447](https://drive.google.com/uc?export=download&id=1A6r1JYCtYa5CdPYASc44a4-NBb_hmJxs)

[Download datasheet gerbang AND](https://drive.google.com/uc?export=download&id=1nX6nrmEijODam_uhJMB6gGXeitWePtUa)

[Download datasheet LED](https://drive.google.com/uc?export=download&id=1YtO5bfoFvpbxuFTrBwO9i-IU_NldhDbr)

[Download datasheet Resistor](https://drive.google.com/uc?export=download&id=1qXMA_QN9e-GcpafHp4sLZgvovX28XkgP)