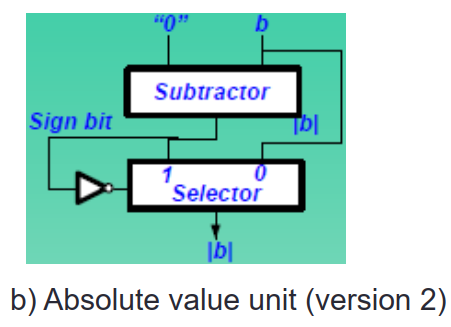
**\*\*\*\*\*\*THIẾT KẾ DATAPATH GỒM:**

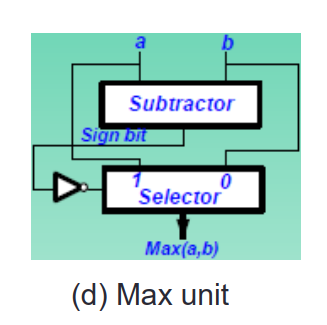
-REGISTER

-MUX 3-to-1, MUX 5-to-1, MUX 2-to-1

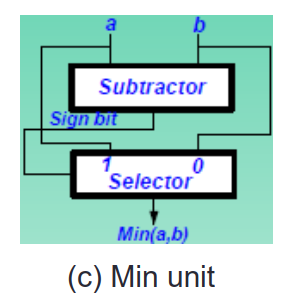
-KHỐI TÍNH ABS



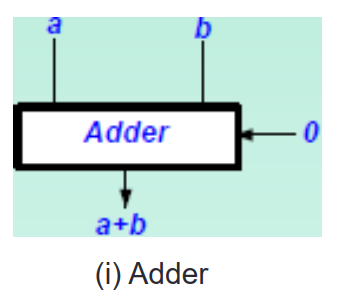
-KHỐI TÍNH MAX



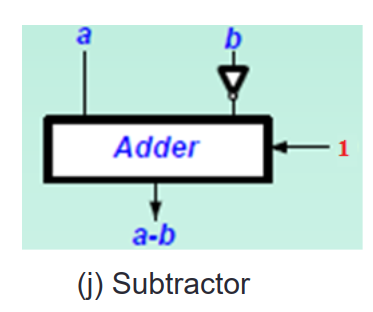
-KHỐI TÍNH MIN



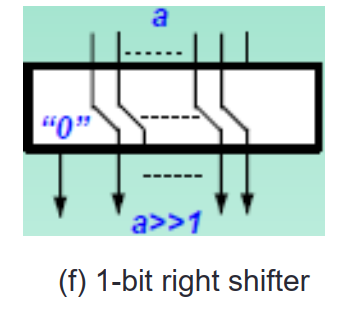
-KHỐI TÍNH +



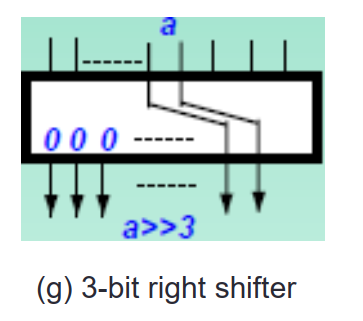
-KHỐI TÍNH –



-KHỐI SHIFTER 1 BIT



-KHỐI SHIFTER 3 BIT



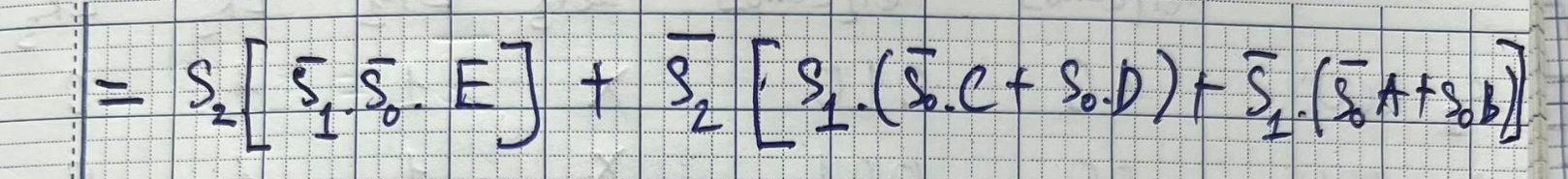
\*\* CHI TIẾT THIẾT KẾ TỪNG KHỐI

-MUX 5-to-1:

+truth table:

A picture containing shape

Description automatically generated



+schematic:

Diagram

Description automatically generated

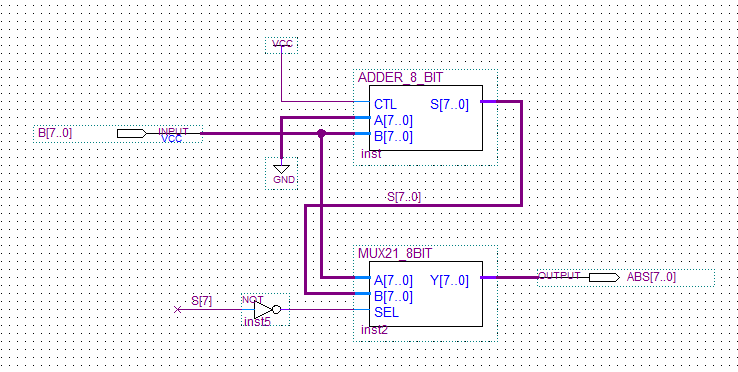
+đóng gói:

A picture containing diagram

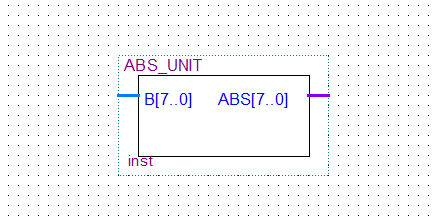
Description automatically generated

-KHỐI TÍNH ABS:

+schematic:

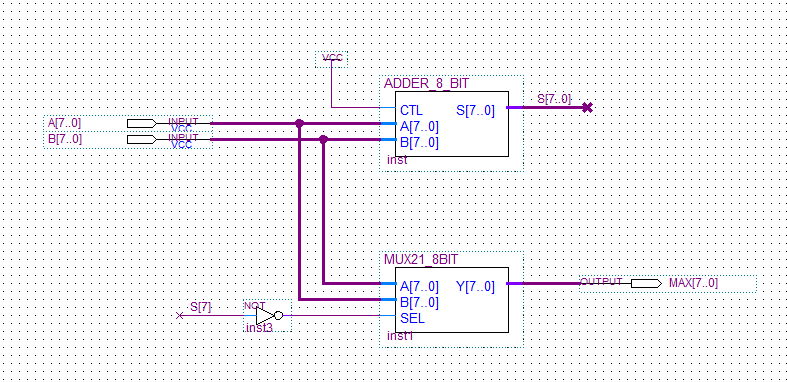


+Đóng gói:

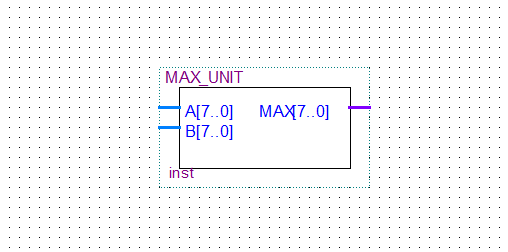


-KHỐI TÍNH MAX:

+schematic:

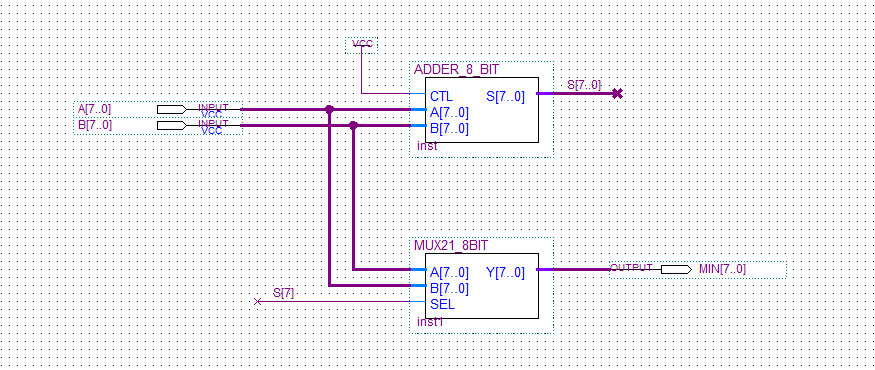


+đóng gói:

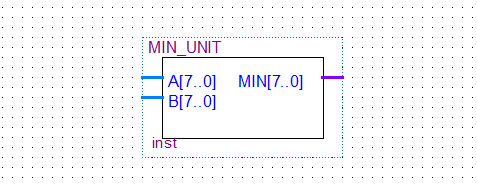


-KHỐI TÍNH MIN:

+schematic:

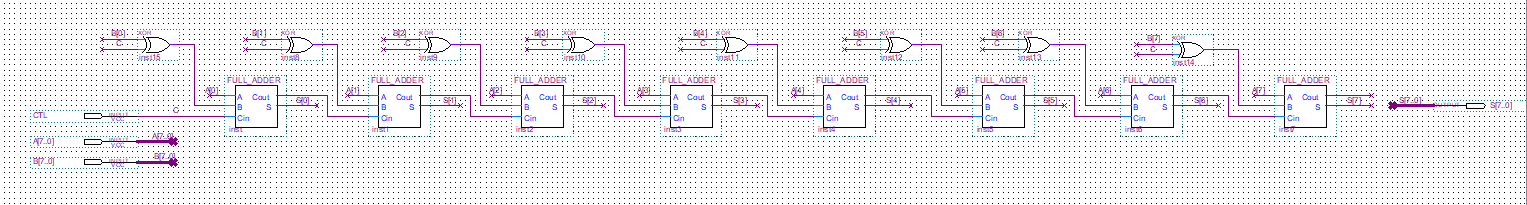


+đóng gói:

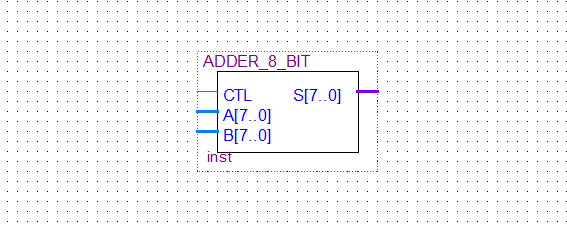


-KHỐI TÍNH +, - :

+schematic:

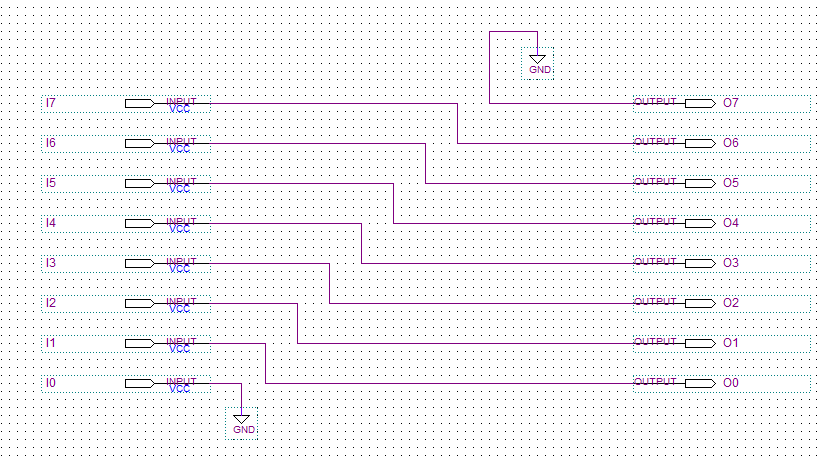


+đóng gói:

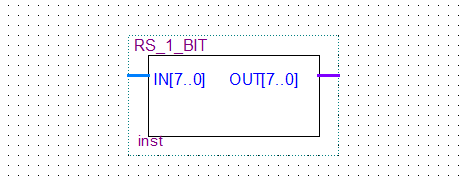


-KHỐI SHIFTER 1 BIT:

+schematic:

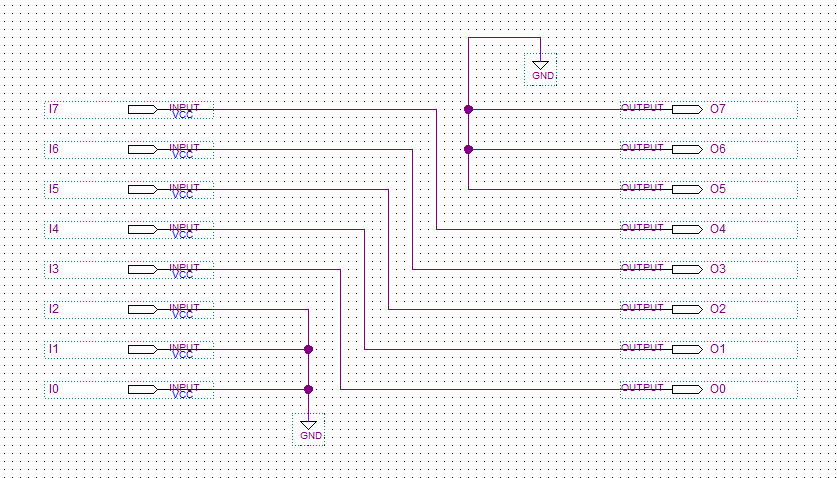


+đóng gói:

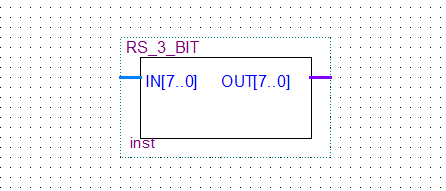


-KHỐI SHIFTER 3 BIT

+schematic:

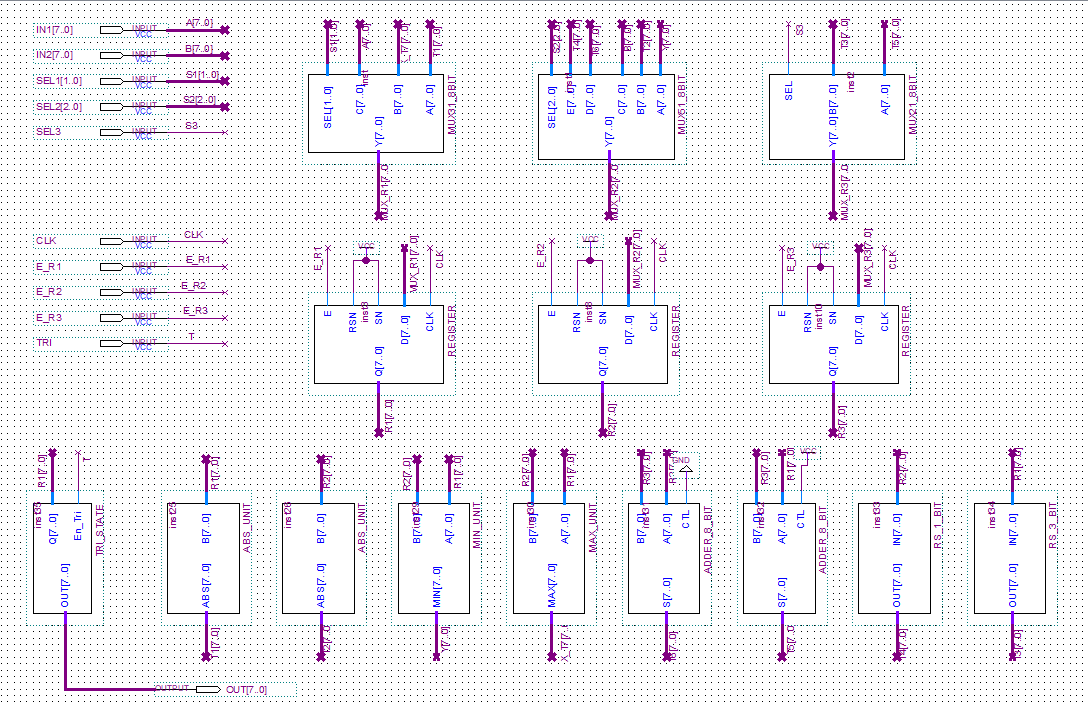


+đóng gói:



* **KẾT NỐI THÀNH DATAPATH:**

-Schematic:

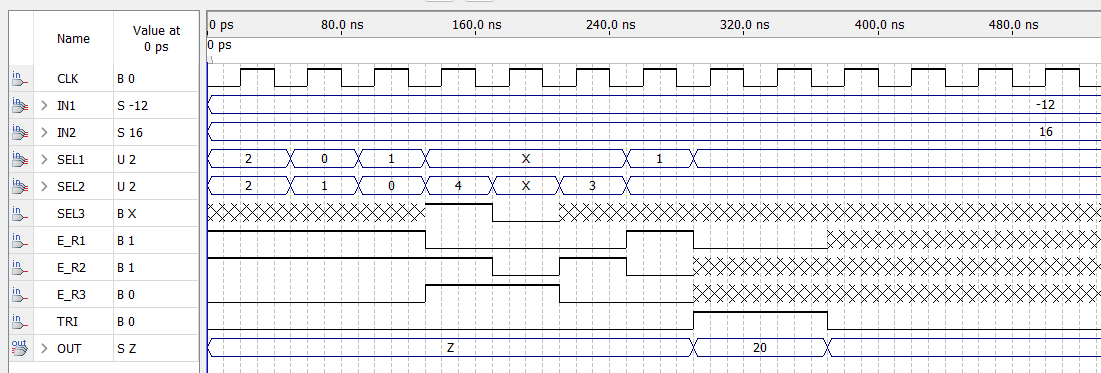


-Đóng gói:

A picture containing chart

Description automatically generated

-Mô phỏng:



**\*\*\*\*\*\*THIẾT KẾ CONTROLLER GỒM:**

-KHỐI TẠO TRẠNG THÁI KẾ TIẾP

-KHỐI LƯU GIỮ TRẠNG THÁI HIỆN TẠI

-KHỐI TẠO OUTPUT

\*\*CHI TIẾT THIẾT KẾ:

\*SƠ ĐỒ KHỐI CÁC BƯỚC THỰC HIỆN GIẢI THUẬT TÍNH CĂN

Diagram

Description automatically generated

\*SƠ ĐỒ CHUYỂN TRẠNG THÁI:

Diagram

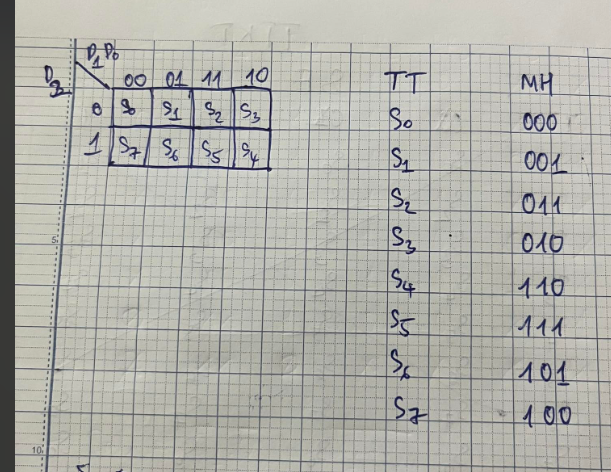
Description automatically generated

\*\***Chú ý: Vì lý do số lượng output lớn nên chỉ hiển thị giá trị output DONE, các output còn lại được thể hiện bảng bên dưới:**

**-**BẢNG CHUYỂN TRẠNG THÁI:



-MÃ HÓA:

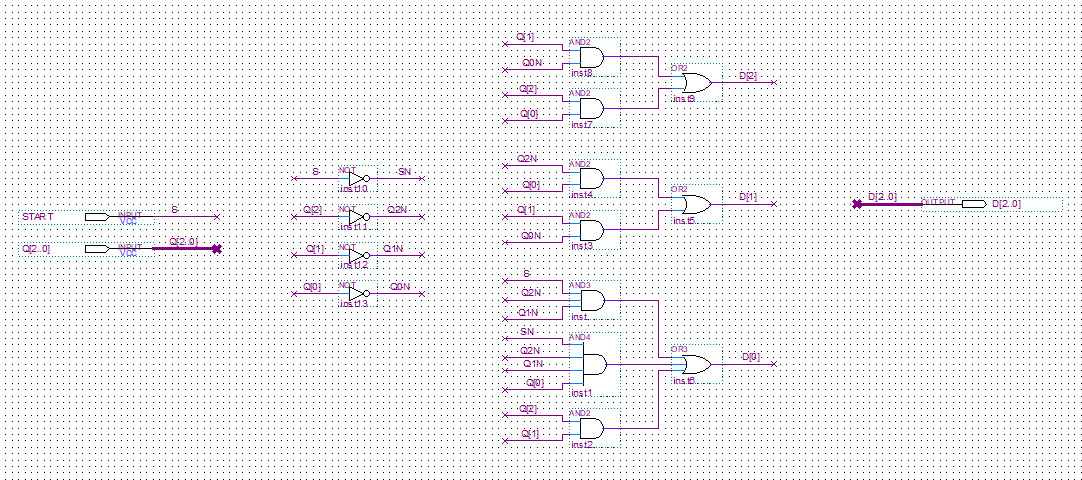


-GIÁ TRỊ NGÕ VÀO CÁC DFF:

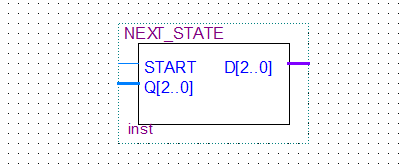
Chart, schematic

Description automatically generated

+SCHEMATIC:



+ĐÓNG GÓI:



-KHỐI LƯU TRẠNG THÁI HIỆN TẠI:

+SCHEMATIC:

Diagram, schematic

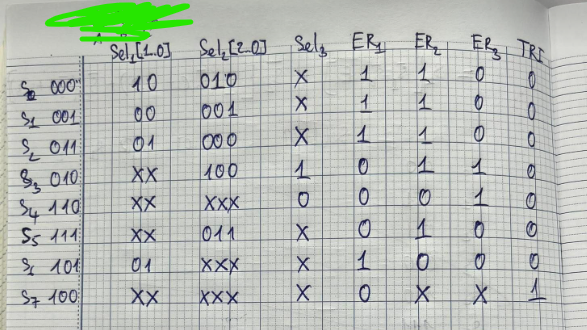
Description automatically generated

+ĐÓNG GÓI:

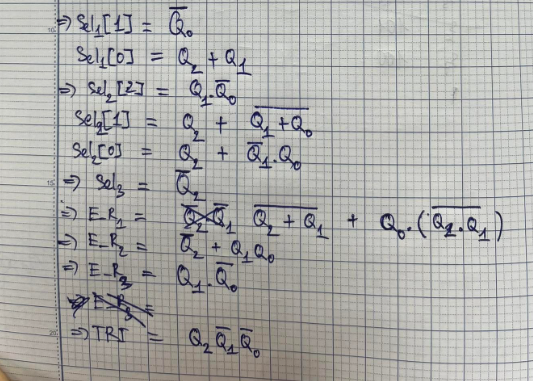
Diagram

Description automatically generated with medium confidence

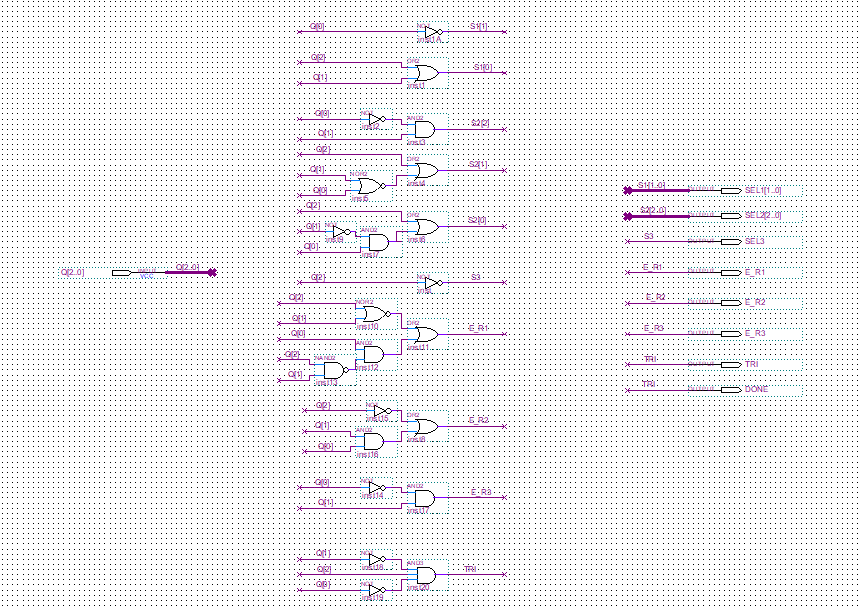
-BẢNG SỰ THẬT CÁC NGÕ RA:



-BIỂU THỨC CÁC NGÕ RA:



+SCHEMATIC:



+ĐÓNG GÓI:

Text

Description automatically generated

* **KẾT NỐI ĐÓNG GÓI KHỐI CONTROLLER:**

-SCHEMATIC:

Calendar

Description automatically generated

-ĐÓNG GÓI:

Text

Description automatically generated

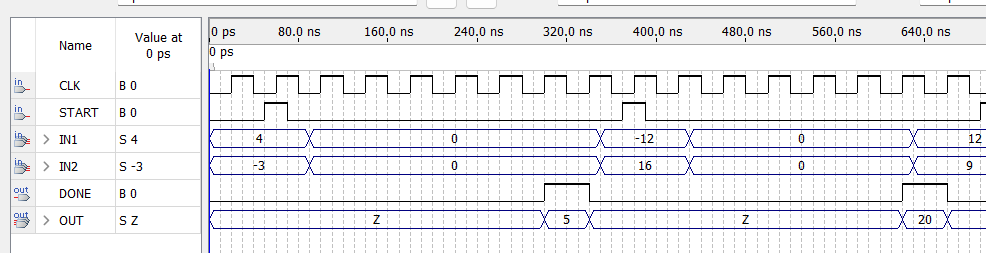
* **TỔNG HỢP ASIC REGISTER SHARING:**

-SCHEMATIC:

Diagram

Description automatically generated with medium confidence

-MÔ PHỎNG:



Diagram

Description automatically generated