PFC State Diagrams

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MA_CONTROL Primitives

- MA_CONTROL.request
  
  \(\text{MA_CONTROL.request} (\text{destination_address, opcode, request_operand_list})\)

- MA_CONTROL.indication
  
  \(\text{MA_CONTROL.indication} (\text{opcode, indication_operand_list})\)
PAUSE Receive State Diagram

- Opcode = pause_command

1. WAIT FOR TRANSMISSION COMPLETION
   - transmission_in_progress = false
   - ((DA = reserved_multicast_address) + (DA = phys_Address))
   - (DA ≠ reserved_multicast_address)
   - (DA ≠ phys_Address)

2. PAUSE FUNCTION
   - n_quanta_rx = data[17:32]
   - Start pause_timer (n_quanta_rx * pause_quantum)

3. UCT

4. END PAUSE
PAUSE Indication State Diagram

BEGIN

NOT PAUSED

- pause_status = not_paused
- MA_CONTROL.indication(pause_command, pause_status)

pause_timer_Done = false

PAUSED

- pause_status = paused
- MA_CONTROL.indication(pause_command, pause_status)

pause_timer_Done = true
802.3bd PFC Receive State Diagram

PFC VALIDATE ADDRESS

opcode = pfc_command

(DA = reserved_multicast_address)

PFC INDICATION

MA_CONTROL.indication (pfc_command, pfc_operand_list)

(DA ≠ reserved_multicast_address)

UCT

PFC DONE
802.1Qbb PFC Indication State Diagram

Per Priority n

(PFC.indication with (e[n] == 1) && (time(n) != 0))

<table>
<thead>
<tr>
<th>PRIORITY N PAUSED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority_NPaused = true</td>
</tr>
<tr>
<td>Start priority_n_timer (time(n) * pause_quantum)</td>
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</tbody>
</table>

(priority_n_timer_done) || (PFC.indication with (e[n] == 1) && (time(n) == 0))

<table>
<thead>
<tr>
<th>PRIORITY N NOT PAUSED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority_NPaused = false</td>
</tr>
</tbody>
</table>
Thank You