# Appendix A: CMI Protocol Support

This appendix describes support in CFG Orion and CFG Gemini for **Common Memory Interface Protocol Specification**

## CMI Feature Adoption

The table below provides a high level summary of CMI features (spec 1.1) supported by NocStudio.

| CMI parameter | CFG CMI NoC Support |
| --- | --- |
| ADDR\_MSB | Supported range 18-59 |
| ADDR\_LSB | The IP supports 0-5 |
| ADDR\_WIDTH | 14-60 |
| CHANCT | The IP supports 1-4 VCs. |
| CHID\_MSB | Supports 0-1 |
| NUM\_TIDS | The IP supports 64-2047. Num\_TIDs is automatically computed by Nocstudio. |
| TID\_MSB | The IP supports from 1 bit to 12 bit TID (TID\_MSB=0-11). |
| LINE\_SIZE | The IP supports line size of 64B |
| WR\_DWIDTH | The agent can take 8B, 16B and 32B interface widths |
| RD\_DWIDTH | The agent can take 8B, 16B and 32B interface widths |
| WR\_DCREDIT | IP supports for 64 |
| RD\_DCREDIT | The IP supports for 32 |
| WDATA\_DELAY | The IP supports fixed delay mode with any WDATA\_DELAY between 0 & 10 |
| RDATA\_DELAY | The IP supports fixed delay mode with any RDATA\_DELAY between 0 & 10 |
| AGNTID\_MSB | The IP supports 2-11 |
| LBINFO\_MSB | The IP supports 0-31 (Master bridge supports 0-31, Slave bridge supports 1-32) |
| FDATA\_ID\_MSB | Data forwarding is not supported. |
| PSC\_MSB | The IP supports 0,9 |
| PSR\_MSB | The IP supports 0,9 |
| CLOS\_MSB | The IP supports 0,2 |
| MAX\_INTLV\_CPL | The IP supports only a value of 0. |
| REQ\_METADATA\_WIDTH | The IP supports value of only 1. But Meta data is not transported. |
| RD\_METADATA\_WIDTH | The IP supports value of only 1. But Meta data is not transported. |
| WR\_METADATA\_WIDTH | The IP supports value of only 1. But Meta data is not transported. |
| RSP\_METADATA\_WIDTH | The IP supports value of only 1. But Meta data is not transported. |
| req\_length | Supports both 32B and 64B transactions |
| dst\_id | Supports both ID based lookup and Address based look up followed by static hashing |
| Ordering | Un ordered CMI NOC. |
| Clock crossing | Clock crossing supported between Bridge and Router but not at protocol Interface |
| Credit Initialization | The IP supports only long Init. |
| Opcodes | MRd, MWr and MWrPtl. Write0 is supported. |