BRIEF SUMMARY

[0005] A system and/or method for a distributed optoelectronic receiver, substantially as shown in and/or described in connection with at least one of the figures, as set forth more completely in the claims.

[0005a] According to a first aspect of the present invention, there is provided a method for communication, the method comprising: in an optoelectronic receiver comprising a grating coupler, a splitter, a plurality of photodiodes, and a plurality of transimpedance amplifiers (TIAs): receiving a modulated optical signal utilizing the grating coupler; splitting the received signal into a plurality of optical signals; generating a plurality of electrical signals from the plurality of optical signals utilizing the plurality of photodiodes; communicating the plurality of electrical signals to the plurality of TIAs; amplifying the plurality of electrical signals utilizing the plurality of TIAs, wherein each TIA is configured to amplify signals in a different frequency range; and generating an output electrical signal from coupled outputs of the plurality of TIAs.

[0005b] According to a second aspect of the present invention, there is provided a system for communication, the system comprising: an optoelectronic receiver comprising a grating coupler, a splitter, a plurality of photodiodes, and a plurality of transimpedance amplifiers (TIAs), the optoelectronic receiver being operable to: receive a modulated optical signal utilizing the grating coupler; split the received signal into a plurality of optical signals; generate a plurality of electrical signals from the plurality of optical signals utilizing the plurality of photodiodes; communicate the plurality of electrical signals to the plurality of TIAs; amplify the plurality of electrical signals utilizing the plurality of TIAs, wherein each TIA is configured to amplify signals in a different frequency range; and generate an output electrical signal from coupled outputs of the plurality of TIAs.

[0005c] According to a third aspect of the present invention, there is provided a system for communication, the system comprising: an optoelectronic receiver comprising a grating coupler, a splitter, first and second photodiodes, a first transimpedance amplifiers (TIA) configured for low frequency operation, and a second TIA configured for high frequency operation, the optoelectronic receiver being operable

to: receive a modulated optical signal utilizing the grating coupler; split the received signal into two optical signals; generate two electrical signals from the two optical signals utilizing the two photodiodes; communicate the two electrical signals to the first and second TIAs; amplify the two electrical signals utilizing the first and second TIAs; and generating an output electrical signal from coupled outputs of the first and second TIAs.

[0006] Various advantages, aspects and novel features of the present disclosure, as well as details of an illustrated embodiment thereof, will be more fully understood from the following description and drawings.