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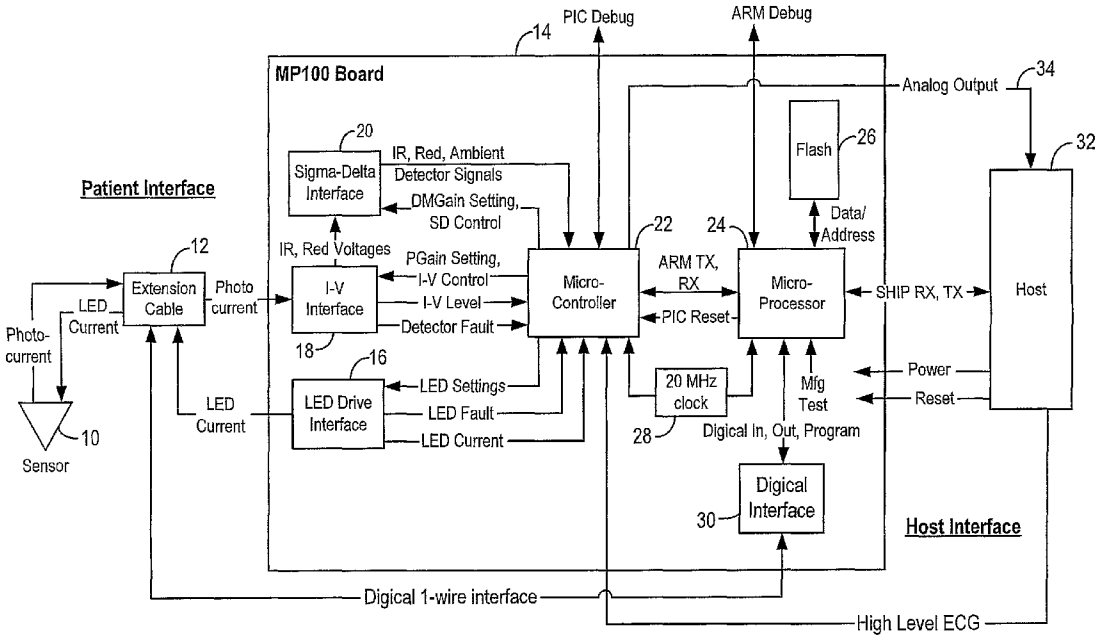
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[Continued on next page]

(54) Title: PULSE OXIMETER WITH SEPARATE ENSEMBLE AVERAGING FOR OXYGEN SATURATION AND HEART RATE



(57) Abstract: The use of two separate ensemble averagers for processing a detected waveform for use in calculating oxygen saturation and a pulse rate. The ensemble averager used for calculating oxygen saturation operates on a signal which has been normalized, while the ensemble averager for the pulse rate calculation operates on a signal which has not been normalized. The metrics chosen for the two paths through the two ensemble averagers can be varied to optimize the ensemble averaging for oxygen saturation or pulse rate calculations.

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