

BioElectronics Corp  
Form NT 10-K  
March 31, 2011

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, DC 20549

FORM 12b-25

SEC File Number: 000-51809  
CUSIP Number: 09062H 10 8

NOTIFICATION OF LATE FILING

(Check One):                       Form 10-K     Form 20-F     Form 11-K     Form 10-Q     Form 10-D     Form  
N-SAR     Form N-CSR

For Period Ended: December 31, 2010

- Transition Report on Form 10-K
- Transition Report on Form 20-F
- Transition Report on Form 11-K
- Transition Report on Form 10-Q
- Transition Report on Form N-SAR

For the Transition Period Ended: \_\_\_\_\_

Nothing in this form shall be construed to imply that the Commission has verified any information contained herein.

PART I  
REGISTRANT INFORMATION

Full Name of Registrant:  
BIOELECTRONICS CORPORATION

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Former name if applicable:

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Address of Principal Executive Office (Street and number):  
4539 Metropolitan Court

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City, State and Zip Code:  
Frederick, Maryland 21704

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PART II  
RULE 12b-25(b) AND (c)

If the subject report could not be filed without unreasonable effort or expense and the Registrant seeks relief pursuant to Rule 12b-25(b), the following should be completed. (Check box if appropriate.)

- (a) The reasons described in reasonable detail in Part III of this form could not be eliminated without unreasonable effort or expense;
- (b) The subject annual report, semi-annual report, transition report on Form 10-K, 20-F, 11-K Form N-SAR or Form N-CSR, or portion thereof will be filed on or before the 15th calendar day following the prescribed due date; or the subject quarterly report or transition report on Form 10-QSB, or portion thereof will be filed on or before the fifth calendar day following the prescribed due date; and
- x (c) The accountant's statement or other exhibit required by Rule 12b-25(c) has been attached if applicable.

PART III  
NARRATIVE

State below in reasonable detail why the Form 10-K, 20-F, 11-K, 10-Q, 10-D, N-SAR, N-CSR or the transition report or portion thereof, could not be filed within the prescribed time period.

The Registrant's Form 10-K for the period ended December 31, 2010 could not be filed within the prescribed time period because the Registrant was unable to complete the preparation for filing of Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations, and Item 8, Financial Statements and Supplementary Data, prior to the close of business on March 31, 2010. Accordingly, the Registrant could not prepare and file the Form 10-K without unreasonable effort or expense.

PART IV  
OTHER INFORMATION

(1) Name and telephone number of person to contact in regard to this notification

|               |             |                    |
|---------------|-------------|--------------------|
| Andrew Whelan | (301)       | 874-4890           |
| (Name)        | (Area Code) | (Telephone Number) |

(2) Have all other periodic reports required under Section 13 or 15(d) of the Securities Exchange Act of 1934 or Section 30 of the Investment Company Act of 1940 during the preceding 12 months or for such shorter period that the registrant was required to file such report(s) been filed? If the answer is no, identify report(s).

x Yes    No

(3) Is it anticipated that any significant change in results of operations from the corresponding period for the last fiscal year will be reflected by the earnings statements to be included in the subject report or portion thereof?

Yes  No

If so: attach an explanation of the anticipated change, both narratively and quantitatively, and, if appropriate, state the reasons why a reasonable estimate of the results cannot be made.

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BIOELECTRONICS CORPORATION

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(Name of Registrant as Specified in Charter)

has caused this notification to be signed on its behalf by the undersigned thereunto duly authorized.

March 31, 2011  
Date

/s/ Andrew Whelan  
Andrew Whelan, President and Chief Financial Officer

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